ORDER NO. VRD9507M122

Service Manual

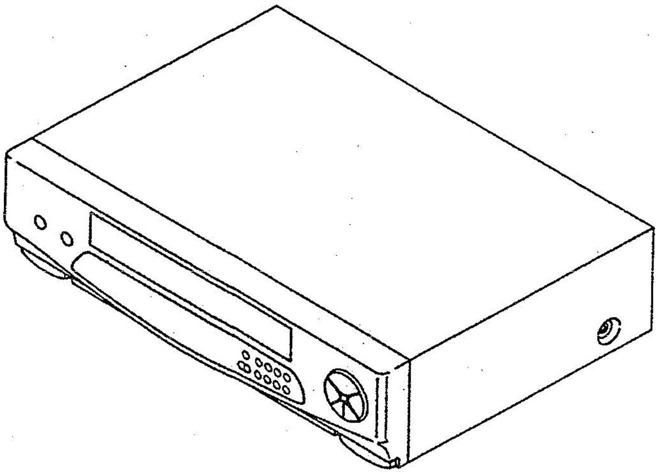
Video Cassette Recorder

Panasonic VHS PAL HQ

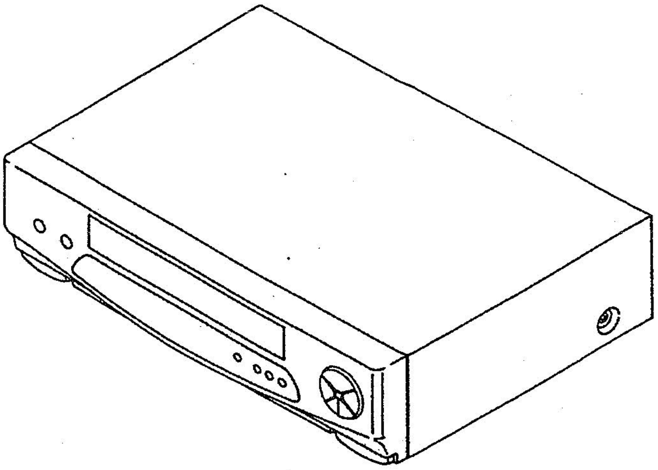
General Description
Adjustment Procedures
Block/ Schematic Diagrams
Exploded Views / Parts List

NV-SD200AM
NV-SD250A/EA/BA

K-MECHANISM



NV-SD200AM



NV-SD250A/EA/BA

Panasonic

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

SPECIFICATIONS

ITEM	SPECIFICATIONS	
POWER	NV-SD200AM	SOURCE: 110 – 240V, 50/60 Hz
	NV-SD250A	SOURCE: 240V, 50/60 Hz
	NV-SD250EA	SOURCE: 230V, 50/60 Hz
	NV-SD250BA	SOURCE: 220 – 240V, 50/60 Hz
	CONSUMPTION: 19 watts	
RECORDING SYSTEM	2 rotary heads, helical scanning system	
	PAL	
TV TUNER SYSTEM	NV-SD200AM	VHF: CHE2 – CHE12 75Ω unbalanced UHF: CHE21 – CHE69 75Ω unbalanced
	NV-SD250A	VHF: CH0 – CH12 75Ω unbalanced UHF: CH21 – CH69 75Ω unbalanced
	NV-SD250EA	VHF: CH1 – CH11 75Ω unbalanced UHF: CH21 – CH69 75Ω unbalanced
	NV-SD250BA	VHF: CH4 – CH11 75Ω unbalanced UHF: CH21 – CH68 75Ω unbalanced
RF OUT SYSTEM	NV-SD200AM	VHF • UHF:CHE3 or E4,73 ± 3dBμ 75Ω terminated
	NV-SD250A	VHF • UHF:CH37±6, 73 ± 3dBμ 75Ω terminated
	NV-SD250EA	VHF • UHF:CH2 or 3, 73 ± 3dBμ 75Ω terminated
	NV-SD250BA	VHF • UHF:CH38$\pm^{2}_{8}$, 73 ± 3dBμ 75Ω terminated
VIDEO	HEADS: 2 rotary heads	
	NV-SD200AM NV-SD250A NV-SD250EA	INPUT: VIDEO IN Connector (Phono type) 1.0 Vp-p, 75Ω unbalanced

ITEM	SPECIFICATION	
VIDEO	NV-SD250BA	INPUT: VIDEO IN Connector (Phono type) 1.0 Vp-p, 75Ω terminated
	NV-SD200AM NV-SD250A NV-SD250EA	OUTPUT: VIDEO OUT Connector (Phono type) 1.0 Vp-p, 75Ω unbalanced
	NV-SD250BA	OUTPUT: VIDEO OUT Connector (Phono type) 1.0 Vp-p, 75Ω terminated
AUDIO	HEAD: 1 Stationary head (Normal Audio)	
	NV-SD200AM NV-SD250BA	INPUT: AUDIO IN Connector (Phono type) More than – 10 dBV (316 mV), More than 50kΩ
	NV-SD250A NV-SD250EA	INPUT: AUDIO IN Connector (Phono type) – 10 dBV (316 mV), More than 50kΩ
	OUTPUT: AUDIO OUT Connector (Phono type) – 6 dBV (500 mV), Less than 1kΩ	
TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)	
TAPE SPEED	SP: 23.39 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape (NV-E240) FF/REW Time: 2 minutes 30 seconds with 180 min. type tape (NV-E180)	
DIMENSIONS	430 (W)X99.9 (H)X295 (D) mm	
WEIGHT	4.2 kg	
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Remote Controller 1 pc. AC Cord	

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.

Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.

Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.

In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.

Section 3, 4 contains block diagrams which offers you information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function etc. ...

Section 5 contains exploded views and parts list.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

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SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

<A> CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., stand the MAIN C.B.A. and connect Extension Cable (VFK1033) between the POWER C.B.A. connector (P1103) and the MAIN C.B.A. connector (P1001) as shown in Fig. S1.
In this position, the following services are possible.

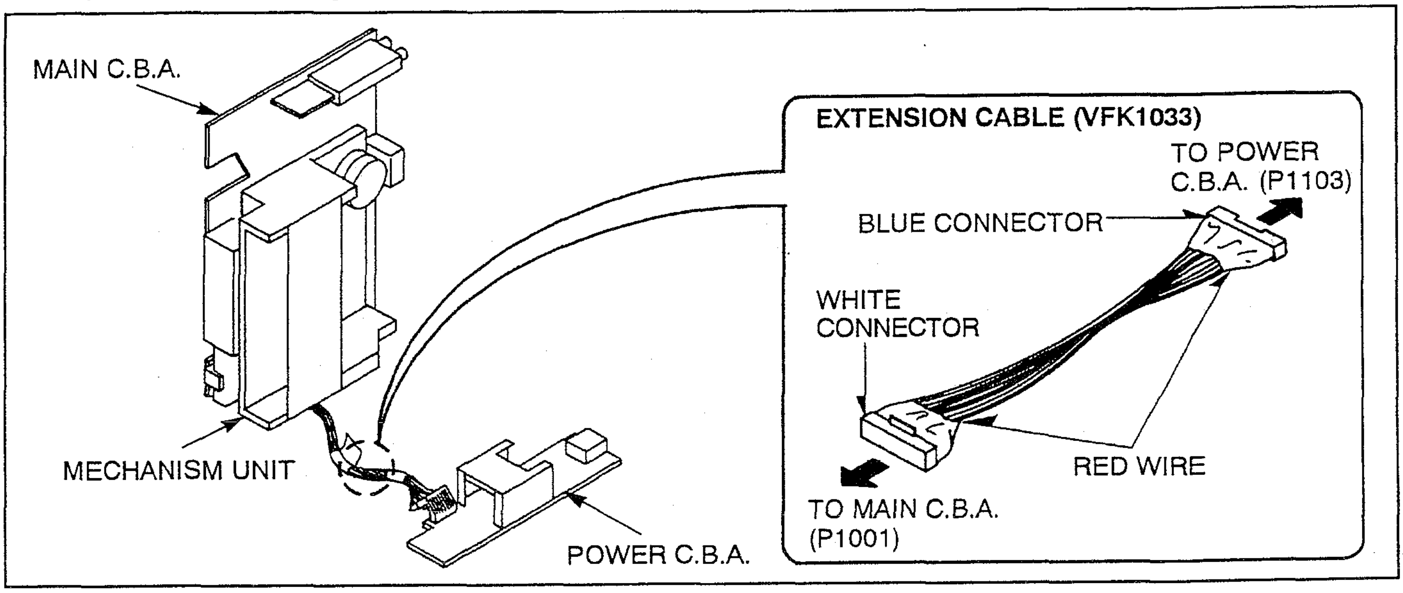

MAIN C.B.A.
EXTENSION CABLE (VFK1033)
TO POWER C.B.A. (P1103)
BLUE CONNECTOR
WHITE CONNECTOR
MECHANISM UNIT
RED WIRE
TO MAIN C.B.A. (P1001)
POWER C.B.A.

Fig.S1

<B> MECHANISM SERVICE POSITION

When servicing the K-Mechanism, take out the mechanism from the MAIN C.B.A. and connect Extension Cable (VFK0889) between the Loading motor connector and P2001 as shown in Fig.S2.
In this position , the following services are possible.

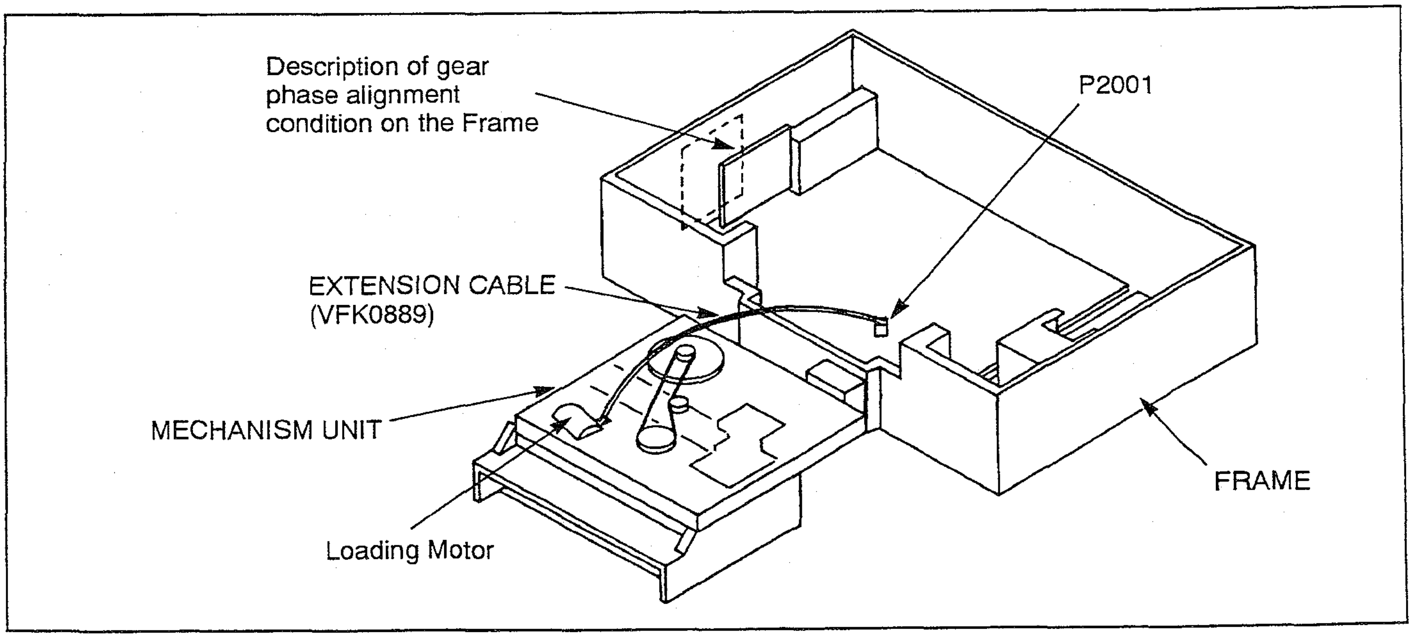

Description of gear phase alignment condition on the Frame
P2001
EXTENSION CABLE (VFK0889)
MECHANISM UNIT
FRAME
Loading Motor

Fig.S2

<B-1>CHECKING OF GEAR PHASE ALIGNMENT CONDITION

Check gear phase Alignment Condition of Mechanism described on the left side of frame.

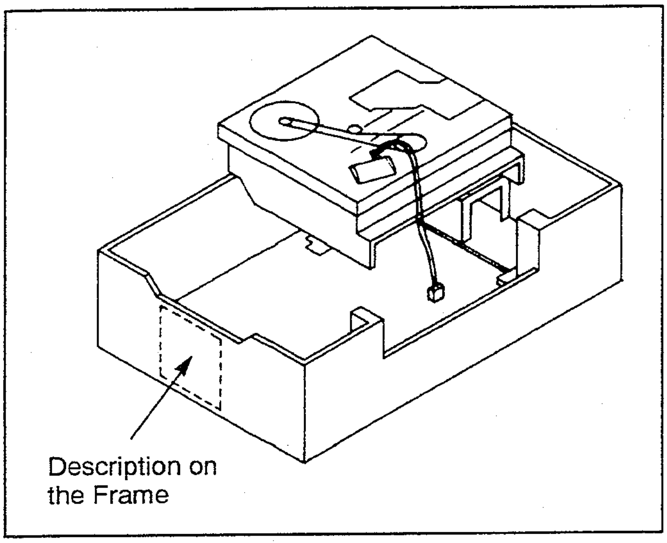


Fig.S3

<B-2> CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for checking of loading/ unloading operation as follows.

(1) HAND OPERATION
1) Turn the Worm Gear or the Worm Wheel Gear (Remove the Loading Motor unit) manually.

(2) BATTERY OPERATION
1) Disconnect the Extension cable (VFK0889) from connection of loading motor unit.
2) Connect the Battery (Manganese-Type R6(AA) 3pcs. /+4.5V) to the Loading motor terminals.

(3) SERVICE INFORMATION DISPLAY OPERATION
1) Set the Service Information display mode. (Press the FF,REW and EJECT buttons simultaneously.)
2) Press the FF,REW and EJECT buttons 7 times to set the Service Mode 7.
3) In the above Service Information Display mode, the Loading Motor rotates for loading operation when the "PLAY" button is pressed. The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of Mechanism movement.

<B-3> CHECKING OF REEL GEARS OPERATION

1) Move the mechanism to "PLAY" position by loading operation (Refer to <A>).
2) Turn the "Rotor Unit" to check the movement of reel gears.

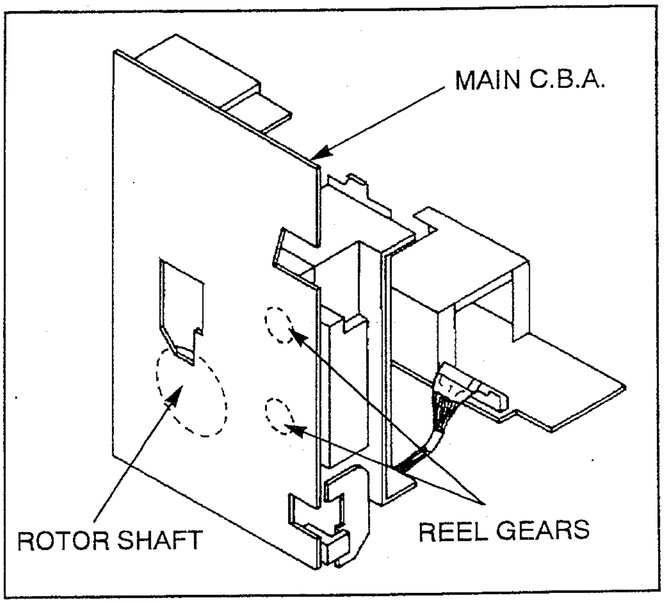


Fig.S4-1

<C> CYLINDER UNIT REPLACEMENT

Remove the 3 Screws of the CYLINDER UNIT with a magnetized screw driver in the MECHANISM SERVICE POSITION.

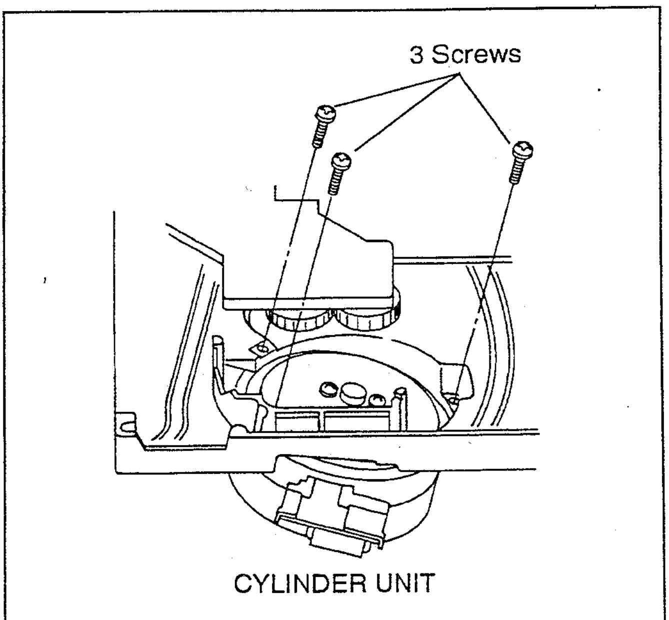


Fig.S4-2

<D> UPPER CYLINDER REPLACEMENT

<D-1> UPPER CYLINDER DISASSEMBLY

1. Remove 2 screws (A).
2. Remove the CYLINDER STATOR C.B.A.
3. Remove 2 screws (B).
4. Remove the CYLINDER ROTOR UNIT.
5. Loose Hex screw (C) and remove the CYLINDER RETAINER. (Use Hex. key Wrench 1.5mm)
6. Remove the UPPER CYLINDER UNIT.

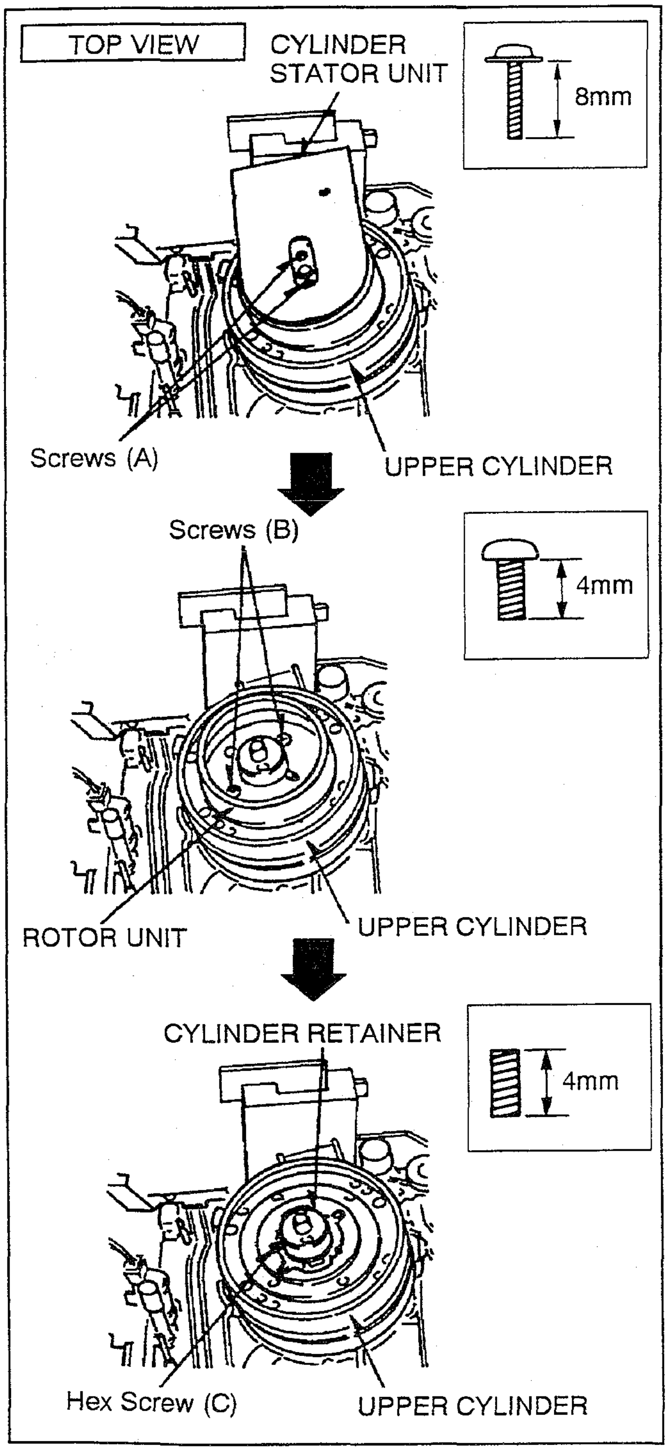

TOP VIEW
CYLINDER STATOR UNIT
8mm
Screws (A)
UPPER CYLINDER
Screws (B)
4mm
ROTOR UNIT
UPPER CYLINDER
CYLINDER RETAINER
4mm
Hex Screw (C)
UPPER CYLINDER

Fig.S5

<D-2> UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order.

Notes:

1) Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the Head Amp Shield Case.
2) Tighten the Hex screw (C) while pressing down on top of the Cylinder Retainer. (Use Hex. key Wrench 1.5mm)

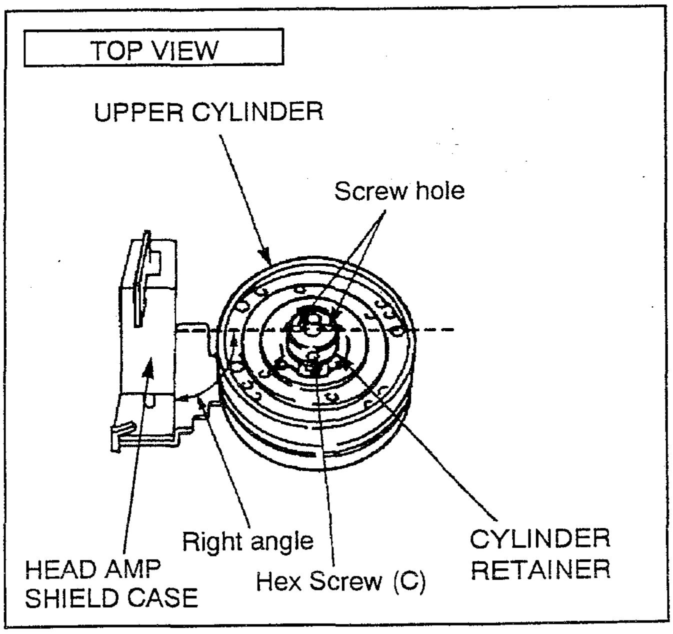

TOP VIEW
UPPER CYLINDER
Screw hole
Right angle
HEAD AMP SHIELD CASE
Hex Screw (C)
CYLINDER RETAINER

Fig.S6

3) Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.
4) Tighten 2 screws (B).

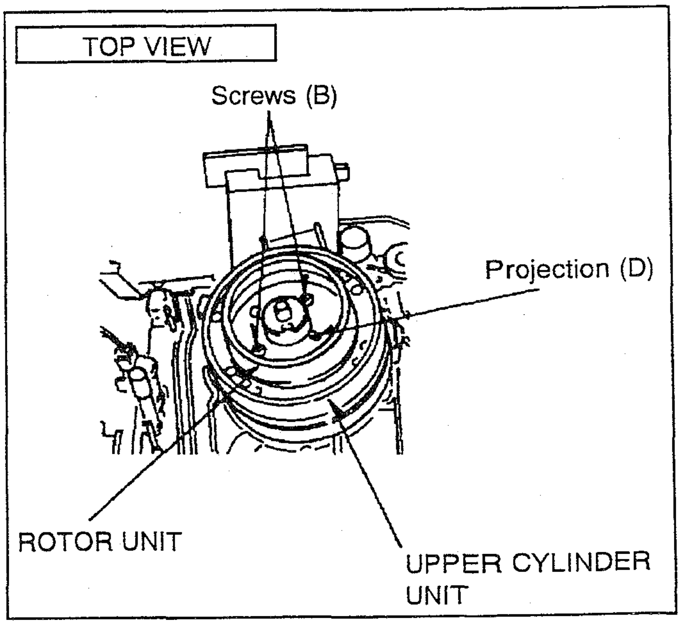

TOP VIEW
Screws (B)
Projection (D)
ROTOR UNIT
UPPER CYLINDER UNIT

Fig.S7

5) Install the Cylinder Stator Unit .
6) Tighten 2 screws (A).

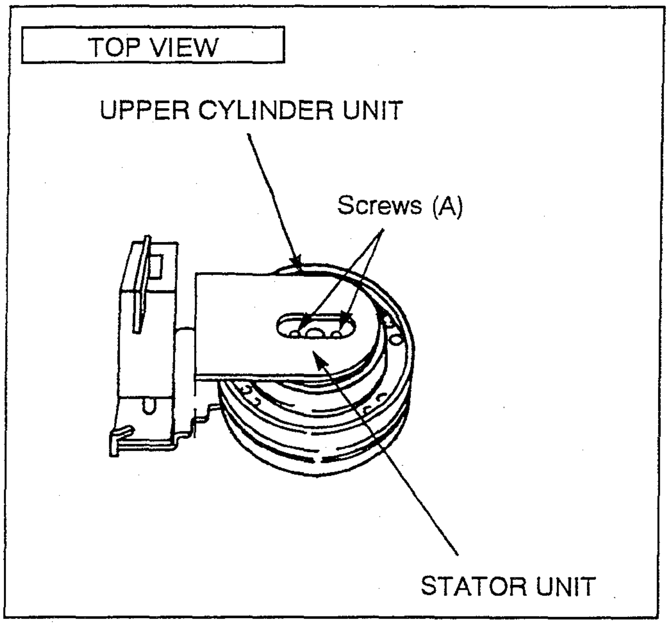

TOP VIEW
UPPER CYLINDER UNIT
Screws (A)
STATOR UNIT

Fig.S8

7) Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL: VFJ8125H3F) and adjust it if necessary.

<E> CAPSTAN STATOR UNIT ASSEMBLY

When replacing the CAPSTAN STATOR UNIT, the STATOR CENTERING TOOL (VFK0851) must be used to center the CAPSTAN STATOR UNIT.

Method:

1) Place the CAPSTAN STATOR UNIT into position.
2) Loosely screw in the 3 Screws.
3) Insert the Stator Centering Tool (VFK0851) as show in Fig.S9.
4) Tighten the 3 Screws.
5) Remove the Stator Centering Tool.

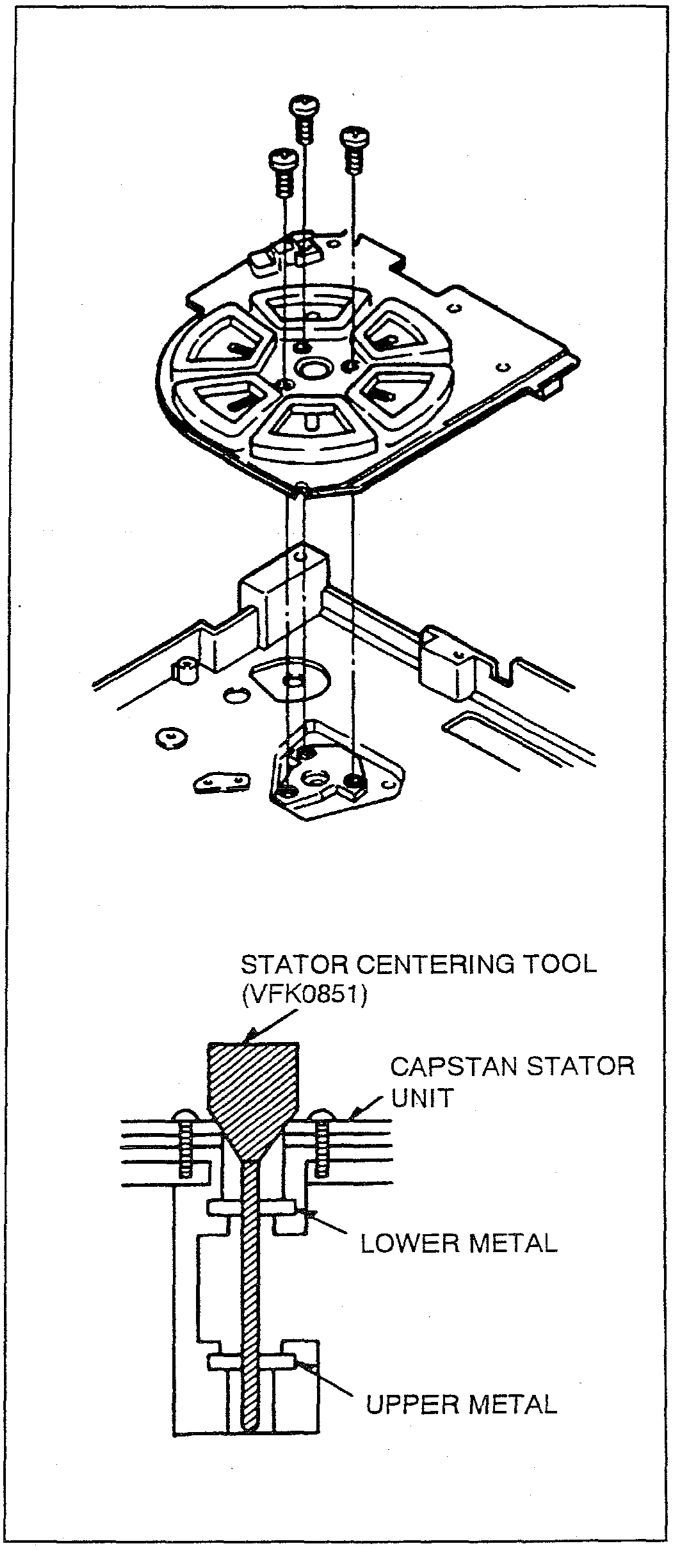

STATOR CENTERING TOOL
(VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig.S9

<F> EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

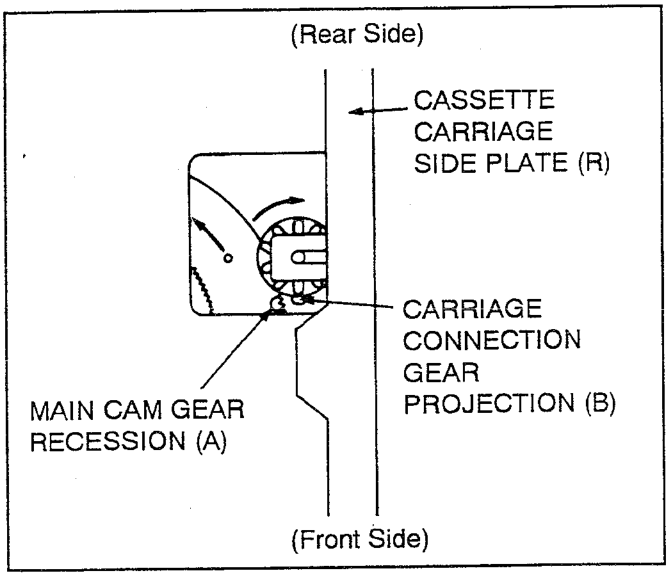

(Rear Side)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(Front Side)

Fig. S10 Top View of Eject Operation

<G> TAKE-UP PHOTO SENSOR OPERATION

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light) falls on the Take- up Photo Sensor.
   In this case, cover the Take-up Photo sensor to prevent the light from falling on it.
2) While servicing of the K-mechanism with "Power On " and without cassette tape inserted, the Unit will not operate properly.

<H> POWER TRANSISTOR SERVICING

When removing the connector of the POWER Transistor, hold the Power Transistor by hand to prevent damage.

< I > CASSETTE TAPE REMOVAL

(1) HAND OPERATION
1) Take out the mechanism from MAIN C.B.A.
2) Turn the Worm Gear manually, moving the Loading post to the unloaded position.
3) Turn the Capstan Rotor Unit clockwise to Take up the Tape.
4) Turn the Worm Gear again to eject the cassette.

(2) BATTERY OPERATION
1) Connect the battery (Manganese-Type R6 (AA)3pcs./+4.5V) to P2001 as shown in Fig.S11.
2) After moving the LOADING POST to the unloaded position, disconnect the battery to stop the motor.
3) Turn the CAPSTAN to clockwise to take up the tape.
4) Reconnect the battery to eject the cassette.

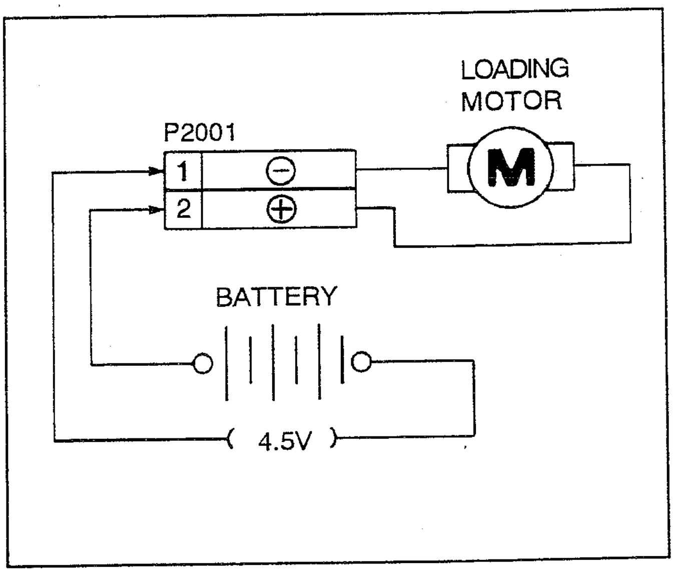


Fig. S11

If the cassette tape can not be removed by the above method, remove it by the following method.

1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the Tape from tape transportation (P3, P2, P5 and P1 Post).
5) Turn the Capstan Motor to take up the Tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the Cassette Tape from the Cassette Compartment.

<J> FLAT RIBBON CABLE INSTALLATION

When installing the Flat Ribbon Cable on the connector, install the cable with the cable contacts facing the connector contacts.

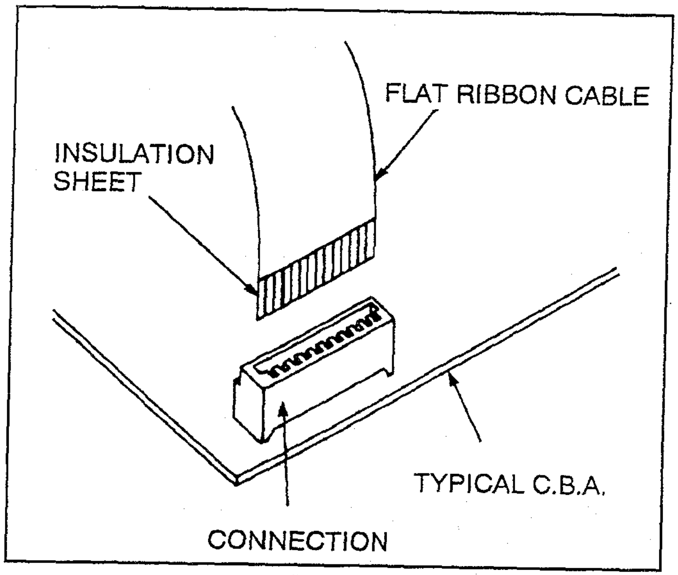

FLAT RIBBON CABLE
INSULATION SHEET
TYPICAL C.B.A.
CONNECTION

Fig. S12

<K> CHANNEL MEMORY IC INITIALIZATION

When replacing the channel memory IC7001 (Part No.:NV-SD200AM; M6M80011AP, NV-SD250A/EA/BA; M6M80041P), its IC should be initialized.

Method:

1) Press the CH UP/DOWN button so that the channel indicator indicates " 3 "
2) Connect a jumper wire twice to TL7004 and TL7005.
3) Channel indication changes from " 3 " to " 1 ".

Note:

1) It should be performed before tuning.
2) Do not turn off the power source during initialization or 1 second after.
3) Meaning of " INITIALIZATION " is to make dependency in different models and to distinguish between different features.

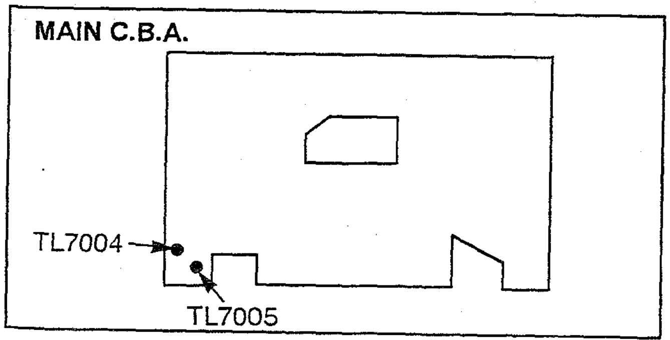

MAIN C.B.A.
TL7004
TL7005

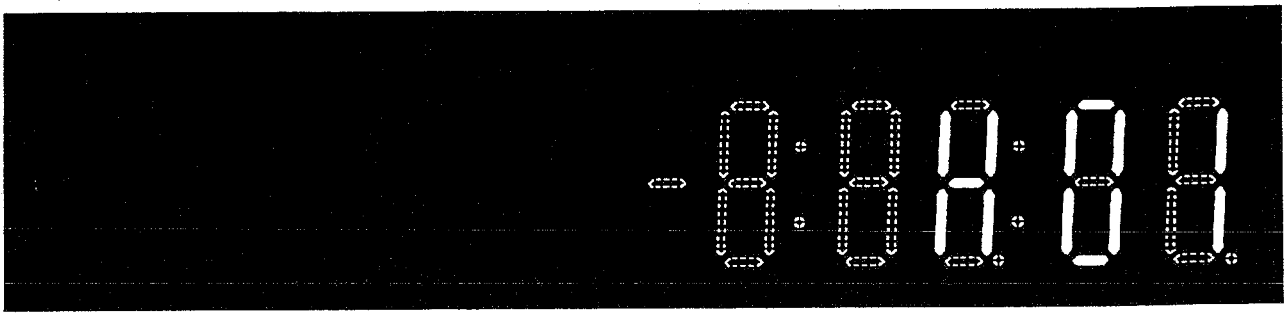
Fig. S13

1-2. SELF- TEST INDICATION DISPLAY

This VTR has a self- diagnosis and display function. If the VTR detects trouble during installation or during use, one of the following Fault indication Codes will automatically appear in the VTR display. Fault indication codes are displayed in the form of a single English letter followed by two numbers, as for example "H01".

Note:
1. The indication "U" is displayed on the FIP while power remains on.
2. Otherwise, the indication "H" or "F" is displayed on the FIP, and the power is automatically turned off.
   When the power is turned on again, the Fault Indication Code will disappear and the unit will return to normal display mode (either clock or counter).
3. This Fault Indication Code will be stored in the Timer microprocessor even with the AC plug disconnected.
   The two- digit number portion of the stored Fault Indication Code can be redisplayed in the FIP's "second" display position (the last 2 digits on the light) by placing the unit is Service Mode Number 2 when turning on Service Information Display as for example "01" or "02" etc.
   If a second error occurs, only the most recent error will be displayed and stored.
4. To erase the stored Fault Indication Code data, press the FF, REW and EJECT buttons simultaneously for 5 seconds.

< FIP >



INDICATION	CAUSE	REMEDY/ CHECK
H01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder- motor drive circuit.
H02	Cassette tape is not wound up during tape unloading except Eject mode.	Check the capstan- motor drive circuit.
F03	Mechanism locks during mode transition except Eject mode.	1.Check the loading- motor drive circuit. 2.Check the mechanism phase alignment. 3.Check the Mode Switch.
F04	Mechanism locks during tape unloading.	1.Check the loading- motor drive circuit. 2.Check the mechanism phase alignment.
F05	Cassette tape is not wound up during tape unloading in Eject mode.	1.Check the capstan- motor drive circuit. 2.Check the Supply/ Take- up reel pulse.
F06	Mechanism locks after tape unloading in Eject mode.	1.Check the loading- motor drive circuit. 2.Check the mechanism phase alignment for Cassette Holder Unit.
F07	Rec power voltage does not appear in Rec mode.	Check the Rec power supply circuit.
F08	Rec power voltage appears except Rec mode.	Check the Rec power supply circuit.
F09	No serial clock transmission between IC2004, IC7005 and IC7701.	Check the serial clock circuit.

Fig. S14 Self- Test Indication Display

1-3. SERVICE INFORMATION DISPLAY

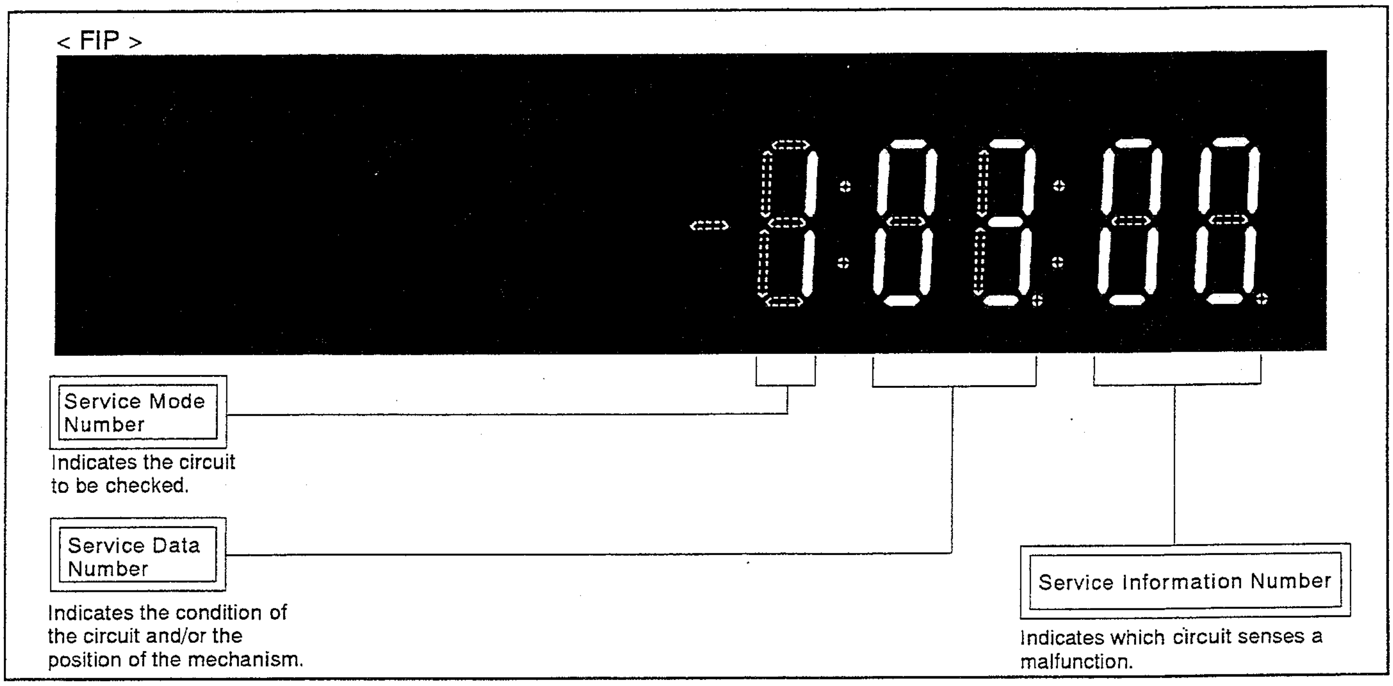

< FIP >
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.
Service Information Number
Indicates which circuit senses a malfunction.

Fig. S15 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Press the FF, REW and EJECT buttons simultaneously.

(2) Connecting a jumper wire between TL6010 and TL6011 (SERV) will display the service information indefinitely.

In the Service Information Display, there are five digits divided into 3 functions. The first digit indicates which of the 7 service modes that the unit is currently in.

MODE 0 : Not Used
MODE 1 : Checks tape protection circuit
MODE 2 : Checks tape transport mechanism
MODE 3 : Checks mode switching operation
MODE 4 : Checks control buttons
MODE 5 : Checks capstan motor
MODE 6 : Checks cylinder motor
MODE 7 : Checks loading/unloading operation
MODE 8 : Not Used
(The mode 8 is displayed only when connecting a jumper wire between TL6010 and TL6011 (SERV).)

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth and fifth digit is the service information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied.

1-3-3. Use of Service Modes

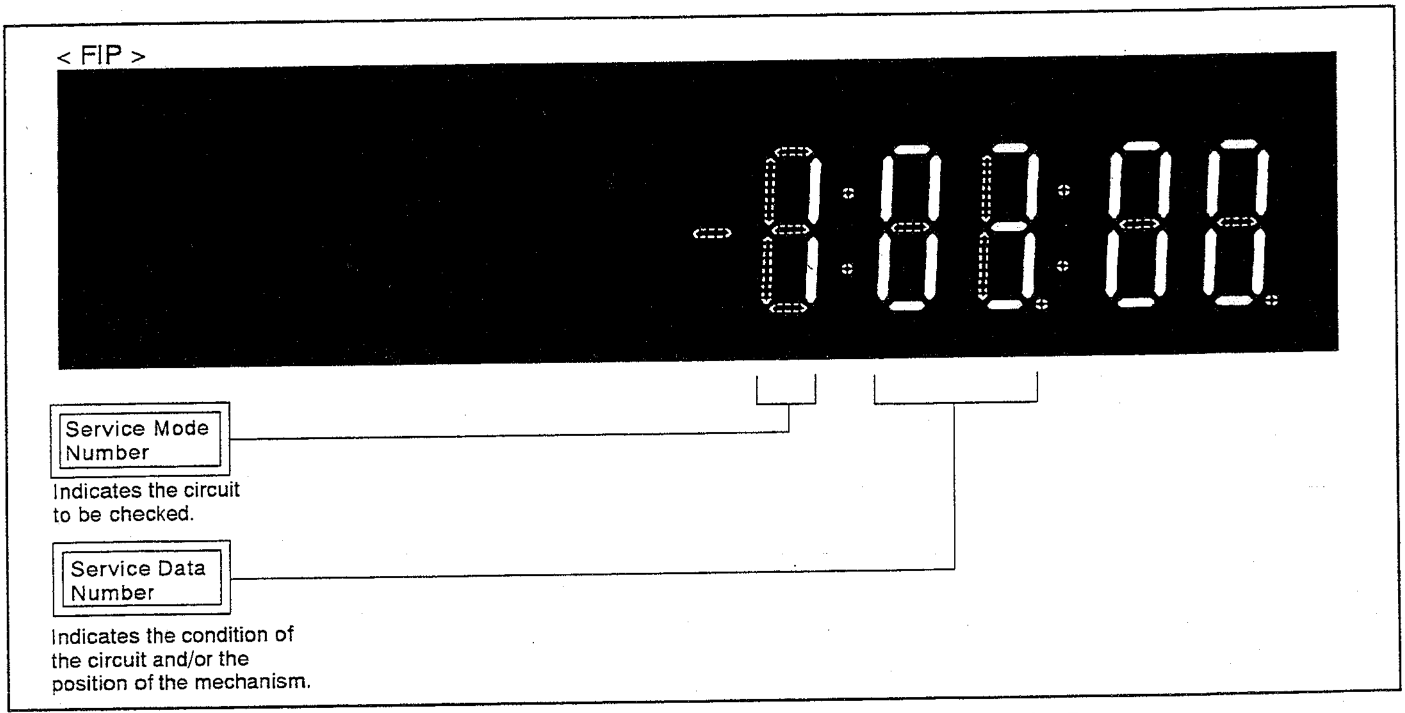
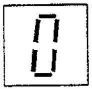

< FIP >
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.

Fig.S16 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.

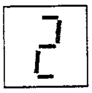
(2) To change Service Modes press the FF, REW and EJECT buttons simultaneously.

(3) Mode 0 : Not Used.



(4) Mode 1 : Check that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors. When the light is blocked to both sensors, "00" should be indicated on the service data number. When the light is blocked to the supply sensor, " 01 " should be indicated.

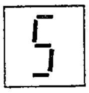
(5) Mode 2 : Checks the mode switch circuit while indicating mechanism position. Service Data Numbers indicate the position of the mode switch and there by the mechanism position.



(6) Mode 3 : Checks that mode switch circuit operations have been completed. Service Data Number should indicate "00" after each mechanism operation iscompleted.

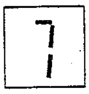
(7) Mode 4 : Checks the operation circuit. Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.

(8) Mode 5 : Checks the capstan motor circuit. Indicates if the IC6001 has received the command to rotate the capstan motor.

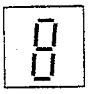


(9) Mode 6 : Check the cylinder motor circuit. IC6001 has received the command to rotate the cylinder motor.

(10) Mode 7 : Checks the Loading/ Unloading Operation. The Loading Motor rotates for loading operation when the " PLAY " button is pressed. The Loading Motor rotates for unloading operation when the " STOP " button is pressed. This mode can be displayed indefinitely until the POWER button is pressed.



(11) Mode 8 : Not Used.

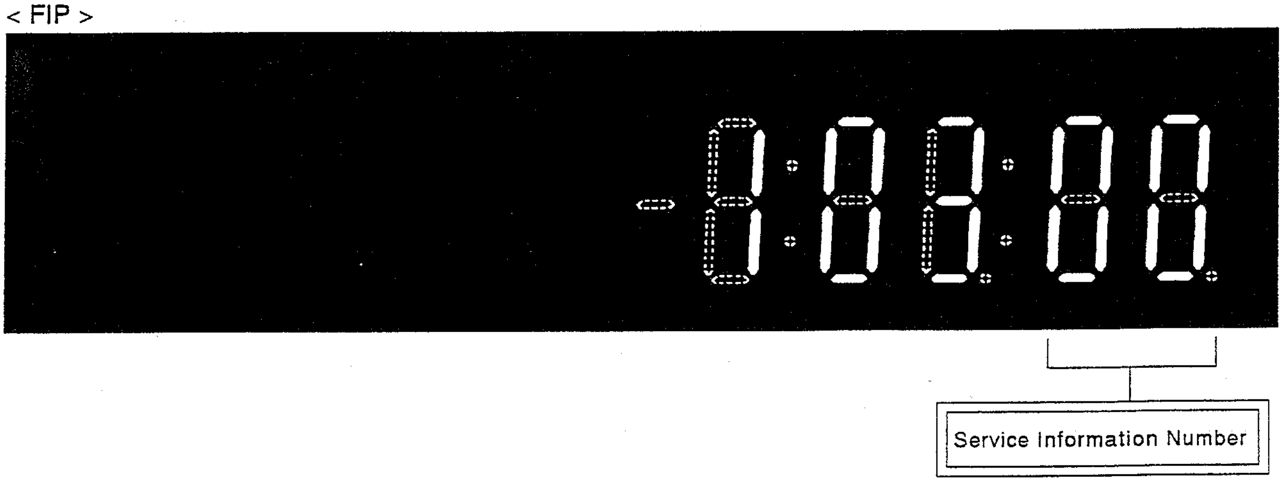


<NOTE>

Refer to Fig. S19 for details of Service Data Number.

1-3-4. Service Information Number

< FIP >



Indicates which circuit senses a malfunction.

Fig. S17 Service Information Number on S. I. D.

Refer to Fig. S18 for details of Service Information Number.

Note:

The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is supplied. If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
00	Normal (No problem)
01	Cylinder stop
02	Tape reel stop
03	Stop at position other than 04 or 06 (Faulty loading motor)
04	Stop during unloading
05	Faulty capstan rotation
06	Stop during Cassette-IN/EJECT operation
07	REC Power voltage error in REC Mode
08	REC Power voltage error except REC Mode
09	Main Serial communication error between system control and Timer

Fig. S18 Detail Service Information Numbers

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	——	00	No light detected at either sensor.	Tape not required
		01	Tape Beginning. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	——	00	EJECT	Tape Required *1: STOP3; The Pinch Roller is on the capstan motor shaft. *2: STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig.S21 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3*1	
		05	STOP *2	
		06	FF/REW	
		07	Intermediate position.	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required
4	Display only when the operating button is pressed.	Refer to Fig.S20.		Tape not required
5	Left digit only, disregard Right digit display.	Left Digit 8 1 Right Digit	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC2004.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard Left digit display.	Left Digit 8 7 Right Digit	1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor "CUE, FF, Forward slow" commands received by IC2004.	
	Right digit only, disregard Left digit display.	Left Digit 8 Right Digit	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "Reverse, Rew, Reverse Slow" commands received by IC2004.	
6	Left digit only, disregard Right digit display.	Left Digit 10 Right Digit	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC2004.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

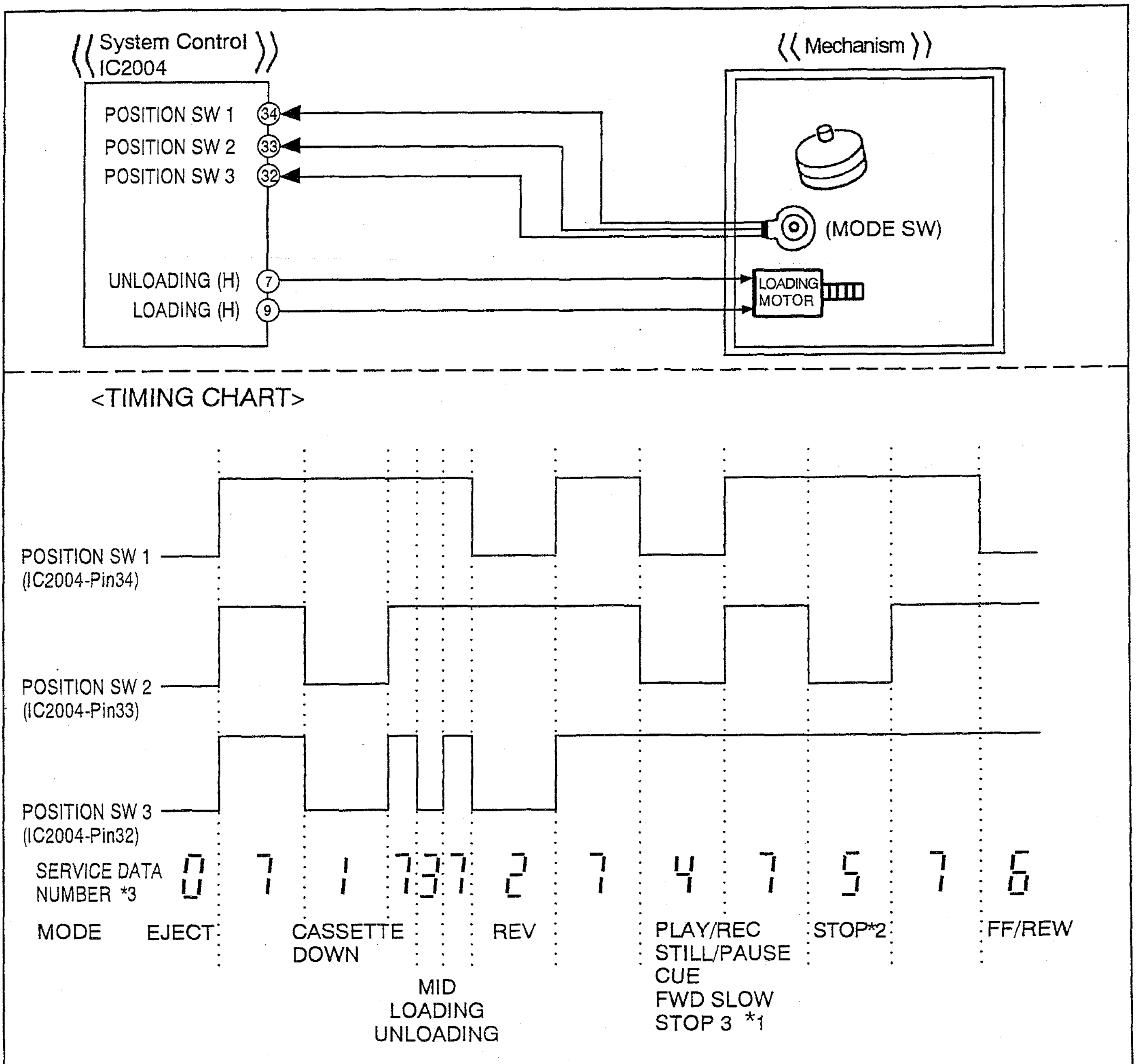
Fig. S19 Detail Service Data Number

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	POWER (NV-SD250A/EA/BA ONLY)	17	8 (NV-SD250A/EA/BA ONLY)
3n	OPERATE (NV-SD200AM ONLY)	18	9 (NV-SD250A/EA/BA ONLY)
-0	INPUT SELECT (NV-SD250A/EA/BA ONLY)	19	0 (NV-SD250A/EA/BA ONLY)
00	STOP	2-	PRESET (NV-SD200AM ONLY)
00	CLOCK (NV-SD200AM ONLY)	34	∧
0	SLOW (NV-SD250A/EA/BA ONLY)	35	∨
0-	STILL ADV (NV-SD200AM ONLY)	36	VTR/TV
01	EJECT	3A	—/-- (NV-SD250A/EA/BA ONLY)
01	PROGRAM	49	INDEX ⏮
02	REW (NV-SD250A/EA/BA ONLY)	4U	INDEX ⏭
02	▲	54	RESET
03	FF	56	DISPLAY
03	▼ (NV-SD250A/EA/BA ONLY)	56	MENU (NV-SD250A/EA/BA ONLY)
03	NEXT (NV-SD200AM ONLY)	57	OSD (NV-SD250A/EA/BA ONLY)
04	▶ (NV-SD250A/EA/BA ONLY)	58	ENTER (NV-SD250A/EA/BA ONLY)
5	ZERO STOP	5n	G-CODE (NV-SD250A/EA ONLY)
05	◀ (NV-SD250A/EA/BA ONLY)	5n	SHOW VIEW (NV-SD250BA ONLY)
06	PAUSE / STILL	90	∧ ② (NV-SD250A/EA/BA ONLY)
08	REC	91	∨ ② (NV-SD250A/EA/BA ONLY)
08	SHIFT (NV-SD200AM ONLY)	92	DATE + (NV-SD250A/EA/BA ONLY)
-9	PAL/MESECAM (NV-SD200AM ONLY)	93	DATE – (NV-SD250A/EA/BA ONLY)
0U	PLAY	94	ON + (NV-SD250A/EA/BA ONLY)
10	1 (NV-SD250A/EA/BA ONLY)	95	ON – (NV-SD250A/EA/BA ONLY)
11	2 (NV-SD250A/EA/BA ONLY)	96	OFF + (NV-SD250A/EA/BA ONLY)
12	3 (NV-SD250A/EA/BA ONLY)	97	OFF – (NV-SD250A/EA/BA ONLY)
13	4 (NV-SD250A/EA/BA ONLY)	A1	TRACKING / V-LOCK +
14	5 (NV-SD250A/EA/BA ONLY)	A2	TRACKING / V-LOCK –
15	6 (NV-SD250A/EA/BA ONLY)	A4	TIMER REC
16	7 (NV-SD250A/EA/BA ONLY)		

Fig. S20 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC2004

System control IC2004 senses the mechanism position through the Mode SW.
Fig. S21 shows the timing for Service Mode Number 2.


《System Control IC2004》
POSITION SW 1
POSITION SW 2
POSITION SW 3
UNLOADING (H)
LOADING (H)
34
33
32
7
9
《Mechanism》
(MODE SW)
LOADING MOTOR
<TIMING CHART>
POSITION SW 1 (IC2004-Pin34)
POSITION SW 2 (IC2004-Pin33)
POSITION SW 3 (IC2004-Pin32)
SERVICE DATA NUMBER *3
0 7 1 7 3 7 2 7 4 7 5 7 6
MODE
EJECT
CASSETTE DOWN
MID
LOADING
UNLOADING
REV
PLAY/REC
STILL/PAUSE
CUE
FWD SLOW
STOP 3 *1
STOP*2
FF/REW

*1 : Stop 3 ;The Pinch Roller is on the Capstan Motor Shaft.

*2 : Stop ;The Pinch Roller is off the Capstan Motor Shaft.

*3 : Service Data Number ; This is for Service Mode Number 2.

Fig. S21 Timing Chart of Mode SW

1-3-6. Input/Output Chart for IC2004

Pin Number	Input/Output	Port Name	Function
1	O	VOLTAGE CHANGE (H)	When increasing the drive torque of loading motor to perform the FF/REW mode, this port is high.
5	I	TAKE-UP REEL	Take-up Reel Pulse Input. (For detecting tape remaining and reel (Cap.) lock.)
6	I	SUPPLY REEL PULSE	Supply Reel Pulse Input. (For detecting tape remaining.)
7	O	UNLOADING (H)	When loading, this port is high.
9	O	LOADING (H)	When unloading, this port is high.
10	O	ARTIFICIAL V/H/N	Artificial Vertical Sync Signal is supplied to video circuit to stabilize the picture in the special playback modes.
11	O	IR REMOCON	Remocon pulse reception port. (Active low)
12	O	HEAD SW	This signal is supplied to the Head Amp circuit to switch the video head, R and L.
13	O	CAP R/S/F	Capstan Rotation Direction Output. Reverse : High Stop : Middle Forward : Low
14	O	CURRENT LIMIT	Capstan torque limiter Output.
15	O	ROTARY SW	Normally this signal is supplied to the chrominance circuit to perform the phase rotation.
19	O	EE/VV/TRICK (L)	When the video goes to the special playback (CUE, REV, SLOW, STILL) mode, this port is low.
22	O	D. REC (H)	When the video goes to the recording mode after a delay from the video recording command, this port is high.
23	O	VIDEO EE (L)	When the video goes to the EE mode, this port is low.
27	O	FF/REW & POWER OFF (L)	When the servo goes to the FF/REW and Power off mode, this port is low.

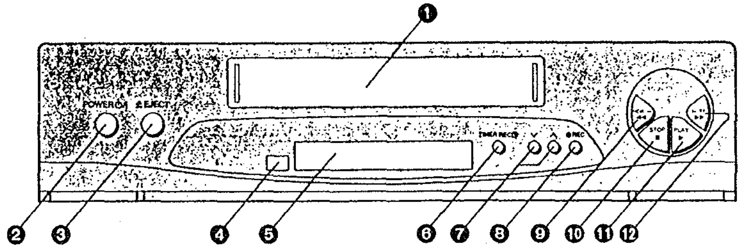
<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>28</td><td>O</td><td>LM LIMIT (H)</td><td>Loading motor Torque limiter Output.</td></tr>
<tr><td>32</td><td>I</td><td>POSITION SW 3</td><td rowspan="3">
<table>
<tr><th>P.SW 3</th><th>P.SW 2</th><th>P.SW 1</th><th>Position (Mode) Name</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>EJECT</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>CASSETTE DOWN</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>REV</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>MID (LOADING / UNLOADING)</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>PLAY/REC, STILL/PAUSE, CUE, STOP3 *1</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>STOP</td></tr>
<tr><td>1</td><td>1</td><td>0</td><td>FF/REW</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the capstan motor shaft.
</td></tr>
<tr><td>33</td><td>I</td><td>POSITION SW 2</td></tr>
<tr><td>34</td><td>I</td><td>POSITION SW 1</td></tr>
<tr><td>37</td><td>I</td><td>RESET (L)</td><td>When resetting the IC2004, this port is low.</td></tr>
<tr><td>38</td><td>I</td><td>OSC</td><td>Main oscillator input.</td></tr>
<tr><td>39</td><td>O</td><td>OSC</td><td>Main oscillator output.</td></tr>
<tr><td>42</td><td>I</td><td>OSC</td><td>Sub oscillator input.</td></tr>
<tr><td>43</td><td>O</td><td>OSC</td><td>Sub oscillator output.</td></tr>
<tr><td>44</td><td>I</td><td>SHORT DOWN</td><td>When the video goes to the recording mode, this port checks the oscillation of full erase head.</td></tr>
<tr><td>45</td><td>O</td><td>AUDIO MUTE (H)</td><td>When the video goes to Power off and special playback (CUE,REV,SLOW,STILL) mode, this port is high.</td></tr>
<tr><td>46</td><td>O</td><td>NTSC (L)</td><td>When the video goes to NTSC mode, This port is low.</td></tr>
<tr><td>47</td><td>O</td><td>POWER OFF (H)</td><td>Power ON/OFF Control is low when the power switch is turned on.</td></tr>
<tr><td>48</td><td>O</td><td>SENSOR LED ON (L)</td><td>When turning on the Sensor LED, this port is low.
1) STOP Mode : No lit.
2) FF, REW, CUE, REV Modes : DC is lit.
3) EJECT Mode : Pulse blinking.</td></tr>
</table>

Pin Number	Input/Output	Port Name	Function
49	O	TV (H)/VTR (L)	TV/VTR switch output TV : High VTR : Low
50	O	SEARCH (H)	When the video goes to search mode in turning, this port is high.
57	O	NTSC REC (L)	When the video goes to NTSC recording mode, this port is low.
59	O	TUNER V MUTE (H)	When the video goes to turning mode, this port is high.
61	O	IN SEL	Input select signal.
62	O	POWER FAIL. OUT	This port goes to low after high signal appears at pin 84 and then this port is high.
63	O	PAL I (H)	When the video goes to PAL I mode, this port is high.
64	O	MESECAM (H)	When the video goes to MESECAM mode, this port is high.
83	I	SAFETY TAB	When inserting the cassette tape with safety tab, this port is low. When there is no safety tab, this port is high to prevent recording.
84	I	POWER FAIL. IN	Power failure detecting input.
87	I	NORMAL/ SERVICE/TEST	Service Mode Setting Normal Mode : High Service Mode : Middle Test Mode : Low
90	I	TAKE-UP PHOTO	Take-up Side Photo Sensor Input. (For detecting tape beginning.)
91	I	SUPPLY PHOTO	Supply Side Photo Sensor Input. (For detecting tape end.)
98	O	TIMER TALK	Peripheral IC control signal. (Data output)
99	I	TIMER LISTEN	Peripheral IC control signal. (Data input)
100	O	TIMER CLOCK	Peripheral IC control signal. (Clock output)

1-4. OPERATING INSTRUCTIONS

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.



❶ **Cassette Compartment**
Insert a video cassette here.

❷ **POWER ⏻/I**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❸ **EJECT**
To eject a video cassette.

❹ **Infra-red Remote Control Receiver Window**

❺ **Display**

❻ **TIMER REC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

❼ **∨ ∧**
To select the required programme position (TV station).

❽ **REC**
To start a recording.

❾ **REW (REWIND)**

In the stop mode:	To rewind the tape
In the playback mode:	To search backward
In the rewind mode:	To obtain high speed picture

"◁◁" is lit.

❿ **STOP**
To stop any playback or recording.

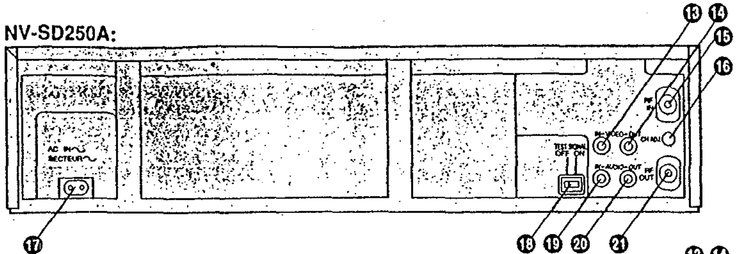
⓫ **PLAY**
To start playback. "▷" is lit.

⓬ **FF (FAST FORWARD)**

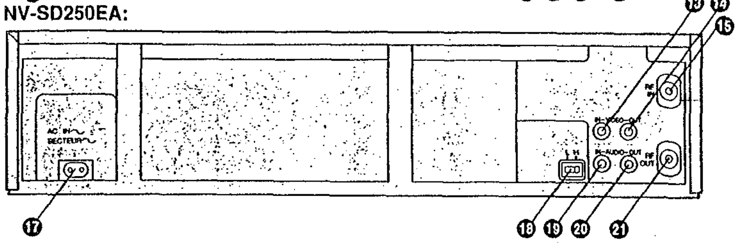
In the stop mode:	To fast forward the tape
In the playback mode:	To search forward
In the fast forward mode:	To obtain high speed picture

"▷▷" is lit.

NV-SD250A:



NV-SD250EA:



⓭ **VIDEO IN**
To connect a video cable to a Movie Camera or another video recorder.

⓮ **VIDEO OUT**
To connect a video cable to a TV or another video recorder.

⓯ **RF IN**
To connect to the external aerial.

⓰ **CH ADJ.**
To adjust the RF transmitting channel 31–43.
(Only for NV-SD250A.)

⓱ **AC IN~**
To connect to the main power supply.

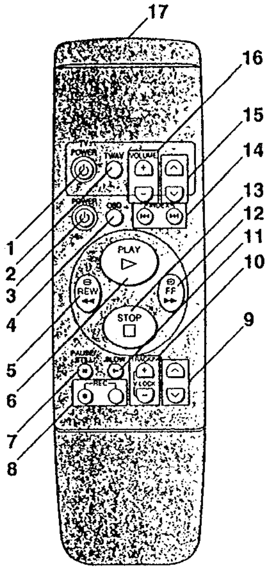
⓲ **NV-SD250A:** **TEST SIGNAL**
The test signal is transmitted on channel 37.
NV-SD250EA: **Video Playback Channel Selector**
To select the video playback channel.

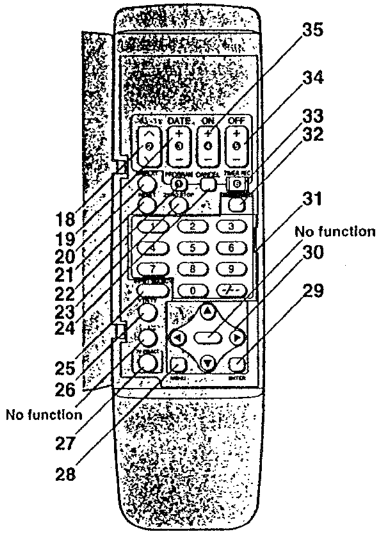
⓳ **AUDIO IN**
To connect an audio cable to a Movie Camera or another video recorder.

⓴ **AUDIO OUT**
To connect an audio cable to a TV or another video recorder.

㉑ **RF OUT**
To connect to the aerial terminal on a TV set.

Infra-red Remote Controller





1 POWER (TV)
To switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
- With some TV models, it may only be possible to switch the TV to standby mode using this button. In this case, use TV/AV or ∨ ∧ (TV) to switch the TV on.

2 TV/AV
To select the TV input.

3 POWER (VTR)
To switch the VTR from on to standby mode or vice versa. In standby mode, the VTR is still connected to the mains.

4 OSD
For the On Screen Display Function.

5 REW (REWIND)

In the stop mode:	To rewind the tape
In the playback mode:	To search backward
In the rewind mode:	To obtain high speed picture

"◁◁" is lit.

6 PLAY
To start playback. "▷" is lit.

7 PAUSE/STILL
During playback: Still picture.
During recording: To interrupt recording.

8 REC
To start a recording.
- Press both buttons simultaneously.

9 ∨ ∧ (VTR)
To select the required programme position (TV station) of the VTR.

10 TRACKING/V-LOCK
For manual tracking adjustment
The + and – buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For slow tracking adjustment
When noise bars appear during Still or Slow playback, switch over to slow playback and adjust with the + or – Button to reduce the noise bars.

For vertical locking adjustment
Use the + and – buttons to minimize any vertical jitter during still-picture playback.

11 SLOW
For the slow motion playback function. "▯▷" is lit.

12 FF (FAST FORWARD)

In the stop mode:	To fast forward the tape
In the playback mode:	To search forward
In the fast forward mode:	To obtain high speed picture

"▷▷" is lit.

13 STOP
To stop any playback or recording.

14 INDEX
For the index search function.

15 ∨ ∧ (TV)
To select the required programme position (TV station) of the TV.

16 VOLUME
To adjust the volume of the TV.

17 Infra-red Transmitter

18 ∨ ∧
To programme a timer recording.

19 DATE
To programme a timer recording.

20 DISPLAY
To change the indication on the VTR Display.

→Clock→Counter ⏎

21 RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

22 PROGRAM
To set and check timer programmes.

23 ZERO STOP
For the zero stop function.

24 CANCEL
To cancel the settings made for a timer recording.

25 INPUT SELECT
To select the "AV" external recording source.

26 VTR/TV

NV-SD250A:	No function.
NV-SD250EA:	To select the VTR mode or TV mode.

27 TV SELECT
To set the remote controller for operation of the TV.

28 MENU
To make OSD menu appear on the TV screen.

29 ENTER
To make selections from On Screen Display.

30 ▲▼◀▶
To make selections from On Screen Display.

31 Programme Position Selector Buttons
- To select the programme positions (1–99).

9: (9)

19: (-/--)→(1)→(9)

- To programme a G-Code number.

32 G-Code
For the G-Code programming.

33 TIMER REC
To turn the timer recording function on and off.
⊡ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

34 OFF
To programme a timer recording.

35 ON
To programme a timer recording.

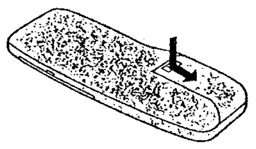
Power Source for the Remote Controller

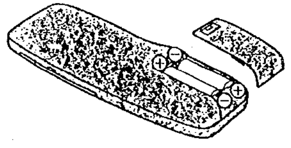
The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

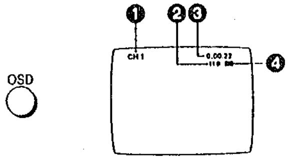
Installing the Batteries

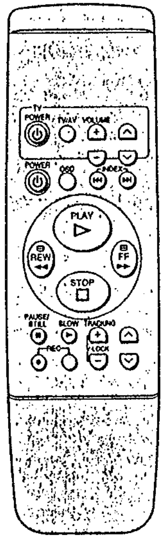




On Screen Display

Press **OSD** to make the On Screen Display appear on the TV screen.
- To make this display disappear, press **OSD** again.


OSD
❶
❷❸
❹
CH1


TV POWER
TV/AV
VOLUME
POWER
OSD
INDEX
PLAY
REW
FF
STOP
PAUSE/STILL
SLOW
TRACKING
REC
LOCK

❶ **Programme position**
❷ **Tape running display**

Stop, Eject	
Rewind, Review	◀◀
Fast Forward, Cue	▶▶
Playback	▶
Still Playback	❚❚
Recording	●
Recording Pause	❚❚●
Slow Playback	❚▶

❸ **Present time/Tape counter**

Information	Display
Present time	17:24
Tape counter	−2:35.47
Dew*	DEW
Index search	S 01

*Only for NV-SD250A.

❹ **Cassette-in Indicator**

Note:
On Screen Display may be disturbed or disappear during special playback.

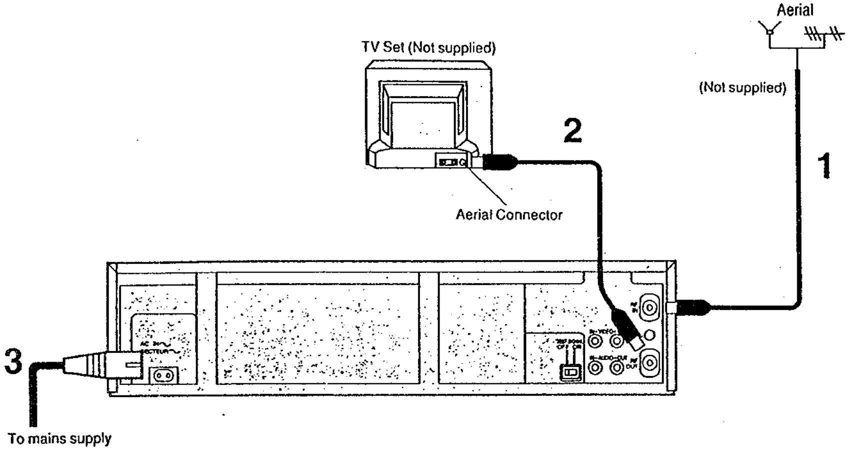
Connections

This tells you how to connect with an aerial, TV, etc.

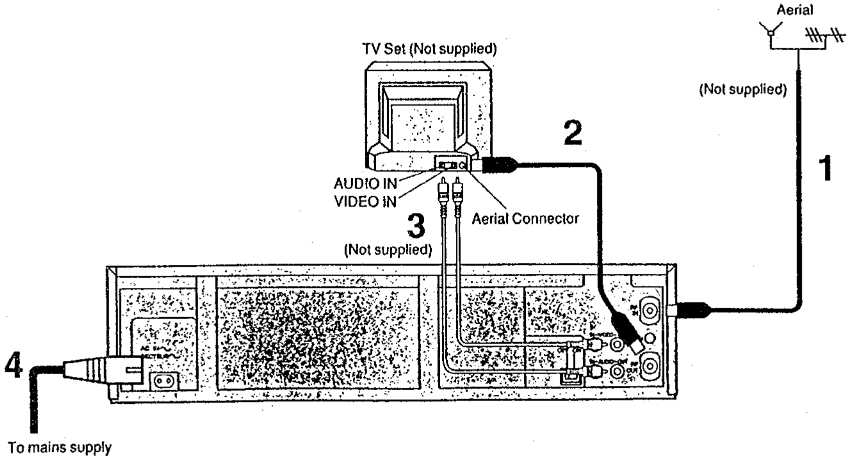
Basic Connections

The following connections are required to record and play back the VTR through TV set:

NV-SD250A:
FOR YOUR SAFETY
Install any external aerial to AS 1417.1.

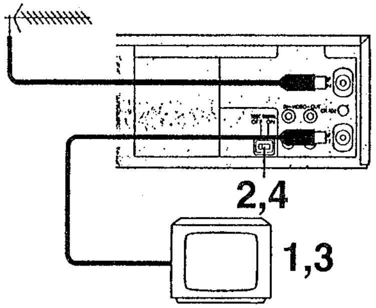

Aerial
(Not supplied)
TV Set (Not supplied)
2
1
Aerial Connector
3
To mains supply

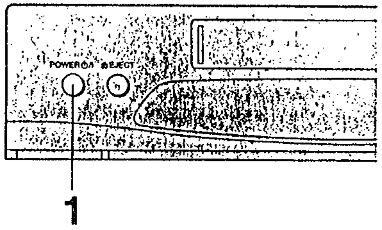
Connection to a TV Set with the Audio/Video Input Sockets


Aerial
TV Set (Not supplied)
(Not supplied)
2
1
AUDIO IN
VIDEO IN
3
Aerial Connector
(Not supplied)
4
To mains supply

Tuning the TV to your VTR

: NV-SD250A





The VTR supplies a signal to the TV set via the RF coaxial cable on channel 37.

It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

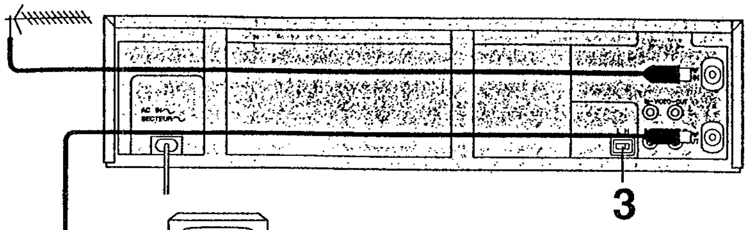
If you have connected the VTR to the TV through the video and audio input sockets then you do not need to follow the procedure mentioned below.

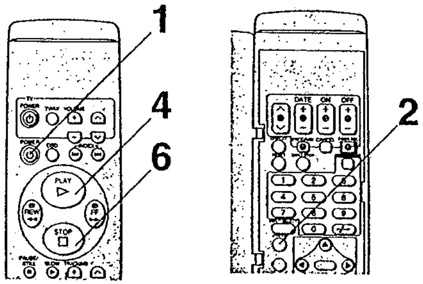
Operations

1	POWER⏻/I ○	Turn on the TV and VTR.
2	TEST SIGNAL OFF ON →	To generate a test pattern, set **TEST SIGNAL** to ON.
3		Set the TV to an unused position which you wish to use for your video playback.
4	TEST SIGNAL OFF ON ←	Set **TEST SIGNAL** to OFF.

Note:
The test signal is transmitted on video channel 37.
If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (31–43) by using the **CH ADJ.** screw which is located on the rear of the VTR.
Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item **2** to **4** above.

: NV-SD250EA





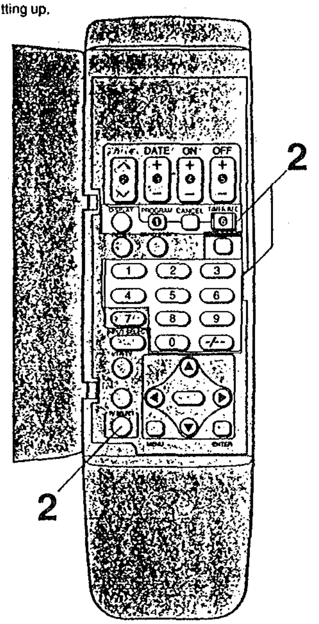
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

If you have connected the VTR to the TV through the video and audio input sockets then you do not need to follow the procedure mentioned below. Instead, simply select AV mode on the television.

Operations		Display Symbol	
1	POWER ⏻		Turn on the TV and VTR.
2	VTR/TV ○	VTR	Select the VTR mode.
3	L H		Select the video playback channel which is not occupied with any TV station. H: Channel 3 L: Channel 2
4	PLAY ▷		Insert a **pre-recorded** cassette tape and press **PLAY**.
5			Select a programme number on the TV set which you wish to use as the video viewing channel. Then tune in the TV to the picture from the cassette tape currently playing.
6	STOP □		Stop the playback.

Setting the Remote Controller for Operation of your TV

You can operate some manufacturer of TVs (see following table) using the supplied Remote Controller after this setting up.



Preparation

Install the batteries in the remote controller. See page 7.

Operations

1 Turn on the TV.

2 Press corresponding operation button to your TV manufacturer (see following table) while keeping **TV SELECT** pressed.
- If setting is correct, TV will be turned off automatically.

TV Manufacturer	Operation Button
Panasonic/National	TV SELECT + DISPLAY
	TV SELECT + PROGRAM 0
	TV SELECT + CANCEL
	TV SELECT + TIMER REC 6
SONY	TV SELECT + 1
TOSHIBA	TV SELECT + 2
JVC	TV SELECT + 3
HITACHI	TV SELECT + 4
MITSUBISHI	TV SELECT + 5
	TV SELECT + 6
SHARP	TV SELECT + 8
PHILIPS	TV SELECT + 9
NEC	TV SELECT + 0
SANYO	TV SELECT + -/--

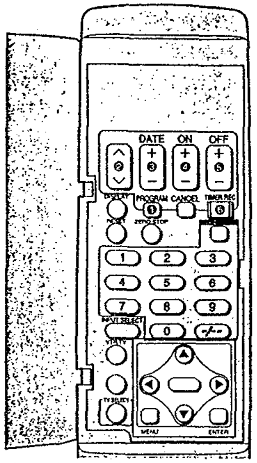
When the TV manufacturer is Panasonic/National or MITSUBISHI:
When the TV's power is turned off in step 2 above, turn it back on and adjust the TV's volume using this remote controller. The volume can be adjusted if the operation button matches the manufacturer of TV.
If it is not possible to adjust the TV's volume, try pressing the other operation button to match the manufacturer of TV again until the volume can be adjusted.

Note:
Some TV models cannot be operated using this remote controller.

Language Setting of On Screen Display

Preparations

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (Only for NV-SD250EA.)



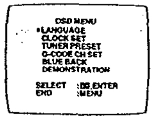
To select the Desired Language

Select one of the two languages displayed: English and Russian.

On Screen Display

1 Press **MENU**.

MENU

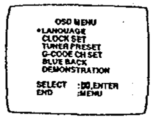


OSD MENU
•LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION

SELECT :▲▼,ENTER
END :MENU

2 Select **LANGUAGE**.

▲ ▼ ➡ ENTER

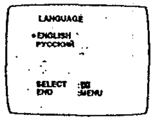


OSD MENU
•LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION

SELECT :▲▼,ENTER
END :MENU

3 Select the desired language.

▲ ▼



LANGUAGE
•ENGLISH
РУССКИЙ

SELECT :▲▼
END :MENU

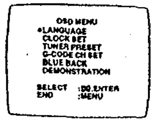
4 Press **MENU** twice.

MENU

To View a Demonstration

1 Press **MENU**.

MENU

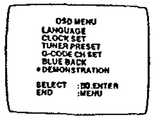


OSD MENU
•LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION

SELECT :▲▼,ENTER
END :MENU

2 Select **DEMONSTRATION**.

▲ ▼ ➡ ENTER



OSD MENU
LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
•DEMONSTRATION

SELECT :▲▼,ENTER
END :MENU

- During Demonstration mode, all the On Screen Displays are displayed one after the other at about five second intervals.

3 Press **MENU** to stop the Demonstration.

MENU

Note:
The Menu Screen has a blue background. However, if there is no signal input during AV is selected, the Menu Screen may change to black and white when **MENU** is pressed.
This does not indicate a malfunction.
If this happens, either input a signal or select other programme position.

Setting the Clock of the VTR

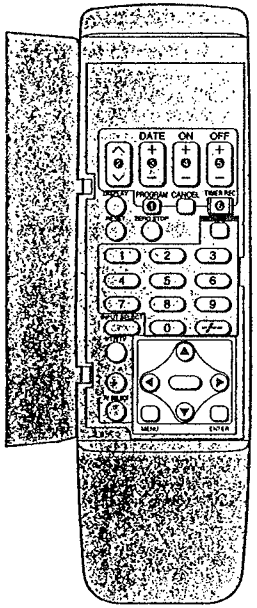
The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

For Example:
Date; 16th, October, 1999
Time; 20:15

Preparation

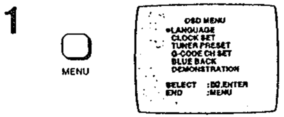
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (Only for NV-SD250EA.)



DATE
ON
OFF
PROGRAM CANCEL
TIMER REC
1
2
3
4
5
6
7
8
9
0
-/--
MENU
ENTER

Operations **On Screen Display**

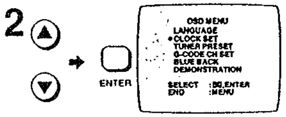
1



MENU
OSD MENU
LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION
SELECT :▲▼ ENTER
END :MENU

Press **MENU**.

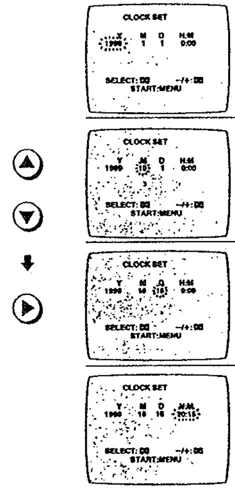
2



ENTER
OSD MENU
LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION
SELECT :▲▼ ENTER
END :MENU

Select **CLOCK SET**.

3 Set each item by pressing ▲ or ▼ and ▶.



CLOCK SET
Y M D H:M
SELECT:▲▼ -/+:▲▼
START:MENU

Set **Year** "1999".

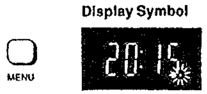
Set **Month** "10".

Set **Date** "16".

Set **Time** "20:15".

- When it is kept pressed, the indication changes in 30-minute steps.
- There is no need to press ▶.

4



MENU
Display Symbol
20:15

Press **MENU**.

- The clock will start.

Note:
The clock operates for at least 5 minutes by its backup system in the event of power failure.

Time Reset Function

If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:
Resetting the clock to 12:00.00.

1. Select **CLOCK SET** from OSD menu and press **ENTER**.
2. When the current clock display on the VTR is between 11:58 to 12:01, press **MENU** as soon as you hear the 12:00.00 time signal. This resets the time to 12:00.00.

Storing TV Broadcasts into your VTR

Introduction

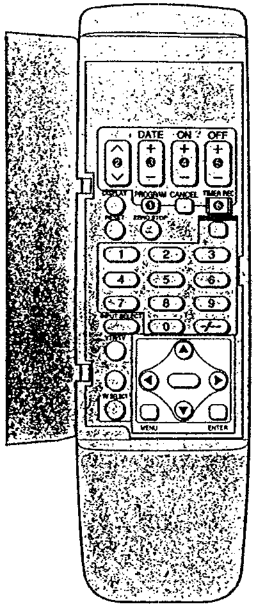
The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 42 TV broadcast stations.

Preparations

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and select the programme position except AV.
- Press **VTR/TV** to select the VTR mode. (Only for NV-SD250EA.)

PRE-PROGRAMMED TV CHANNELS (NV-SD250A)
The local TV transmission channels 2, 7, 9 and 10 are factory-preset in this VTR. That is, if you can receive television broadcasts on VHF channels 2, 7, 9 and 10, these are already tuned on the programme positions with the matching numbers.
However, it is possible to cancel these presettings and tune the local TV broadcast channels on any desired programme positions.
For alternative settings and tuning of additional TV broadcasts channels, follow the Tuning Operations.

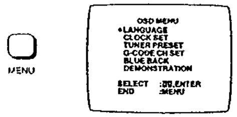
Auto Tuning Procedure



DATE
ON
OFF
PROGRAM CANCEL
TIMER REC
1
2
3
4
5
6
7
8
9
0
-/--
MENU
ENTER

Operations **On Screen Display**

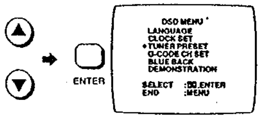
1



MENU
OSD MENU
LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION
SELECT :▲▼ ENTER
END :MENU

Press **MENU**.

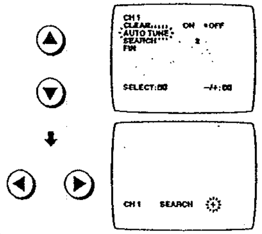
2



ENTER
OSD MENU
LANGUAGE
CLOCK SET
TUNER PRESET
G-CODE CH SET
BLUE BACK
DEMONSTRATION
SELECT :▲▼ ENTER
END :MENU

Select **TUNER PRESET**.

3



CH1
CLEAR
AUTO TUNE
SEARCH
FM
ON
OFF
SELECT:▲▼ -/+:◀▶
CH1 SEARCH

Select **AUTO TUNE** and press ◀ or ▶.

- When the Auto Tuning finished, On Screen Display disappears and programme position 1 is selected.

Notes:

- The Auto Tuning is searching for TV station from VHF minimum to UHF maximum and memorizing the data for every programme position. The other programme positions are skipped.
- The Auto Tuning takes seven or more minutes to complete the search.
- If VTR is not correctly tuned by Auto Tuning, follow the procedure on next page.

Preparations for G-Code Programming

Manual Tuning Procedure

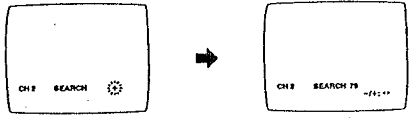
1 Press **MENU**.

2 Select **TUNER PRESET** by pressing ▲ or ▼ and **ENTER**.

3 Select **CH** by pressing ▲ or ▼ and then select the programme position by pressing ◀ or ▶.

4 Confirm that **CLEAR** is set to **OFF**.

5 Select **SEARCH** by pressing ▲ or ▼ and then press ▶.



- If the desired TV station is not be tuned, press ▶ again.
- Press **MENU** and repeat steps 3–5 for each programme position you want to tune to a station.

6 Press **MENU** three times.

Channel Plan

	VHF		UHF
	VL	VH	
NV-SD250A	0–5	5A–12	21–69
NV-SD250EA	1–3	4–11	21–69

NV-SD250A:

Broadcast TV Channel	Position tuned on VTR
2 ABC	2
7 ATN	7
9 TCN	9
10 TEN	10
28 SBS	28

This table will be required when programming the G-Code.

Fine Tuning Procedure

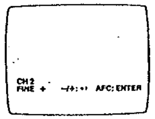
1 Press **MENU**.

2 Select **TUNER PRESET** by pressing ▲ or ▼ and **ENTER**.

3 Select **CH** by pressing ▲ or ▼ and then select the programme position by pressing ◀ or ▶.

4 Select **FINE** by pressing ▲ or ▼.

5 Press ◀ or ▶ to obtain the best tuning condition.



- To return the tuning to its former state, press **ENTER**.

6 Press **MENU**.

Blanking of Unoccupied Programme positions

1 Press **MENU**.

2 Select **TUNER PRESET** by pressing ▲ or ▼ and **ENTER**.

3 Select **CH** by pressing ▲ or ▼ and then select the programme position by pressing ◀ or ▶.

4 Select **CLEAR** by pressing ▲ or ▼.

5 Select **ON** by pressing ◀ or ▶.
- Repeat steps 3–5 for another unoccupied programme positions to skip during the selection of the programme positions.
- To cancel the blanking of a programme position, select that programme position and then select **CLEAR OFF**.

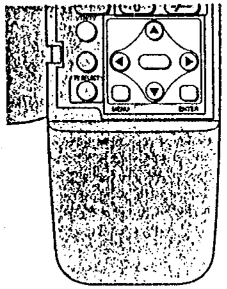
6 Press **MENU** twice.

Identification numbers must be set for G-Code programming. Simply proceed with the G-Code programming operation described on page 24, and the identification numbers of the TV stations concerned will be set automatically. This means that G-Code programming is possible even without performing the operation described on this page. However, you can follow the setting procedure described below if you wish to set the identification numbers of all the TV stations prior to actual programming.

"Identification numbers" refer to the numbers used for identifying the TV stations.
The programme positions on the VTR receiving the TV stations are set in these identification numbers.
Have a newspaper or magazine on hand which lists today's local TV station programmes and G-Code numbers.

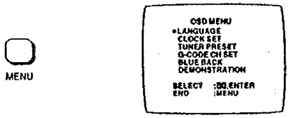
Preparations

- Set the clock of the VTR. See page 14.
- Store TV broadcasts into your VTR. See pages 15 and 16.
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode.
 (Only for NV-SD250EA.)

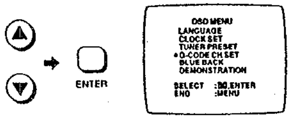


Operations **On Screen Display**

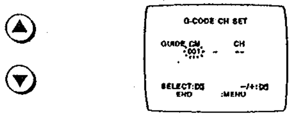
1 Press MENU.



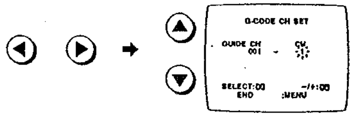
2 Select G-CODE CH SET.



3 Select the identification number (001–255).



4 Press ◀ or ▶ and then select the programme position (1–42, AV).



- To set the other TV stations, press ◀ or ▶ and then repeat steps 3 and 4.

5 Press MENU twice.

MENU

Note:
To receive satellite stations, the satellite receiver must be connected to the VTR and programme position must be set depending on the type of the connection mode.
AV: When the satellite receiver is connected to the Audio/Video input sockets.
- When the satellite receiver is connected by means of the RF coaxial cable, set to a free programme position between 1 and 42.

For Example: (NV-SD250A)

TV Station	Programme Position on VTR	Identification Number
ABC	2	002
ATN	7	007
TCN	9	009
TEN	10	010
SBS	28	028/001

For Example: (NV-SD250EA)

TV Station	Programme Position on VTR	Identification Number
TV ONE	1	001
CHANNEL 2	2	002
TV3	3	003
SKY TV MOVIES	4	004
SKY TV SPORTS	5	005
SKY TV NEWS	6	006
CTV	7	007
ACTION TV	8	008

SECTION 2

ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to gain access to part for servicing. When reassembling, perform the steps in the reverse order.

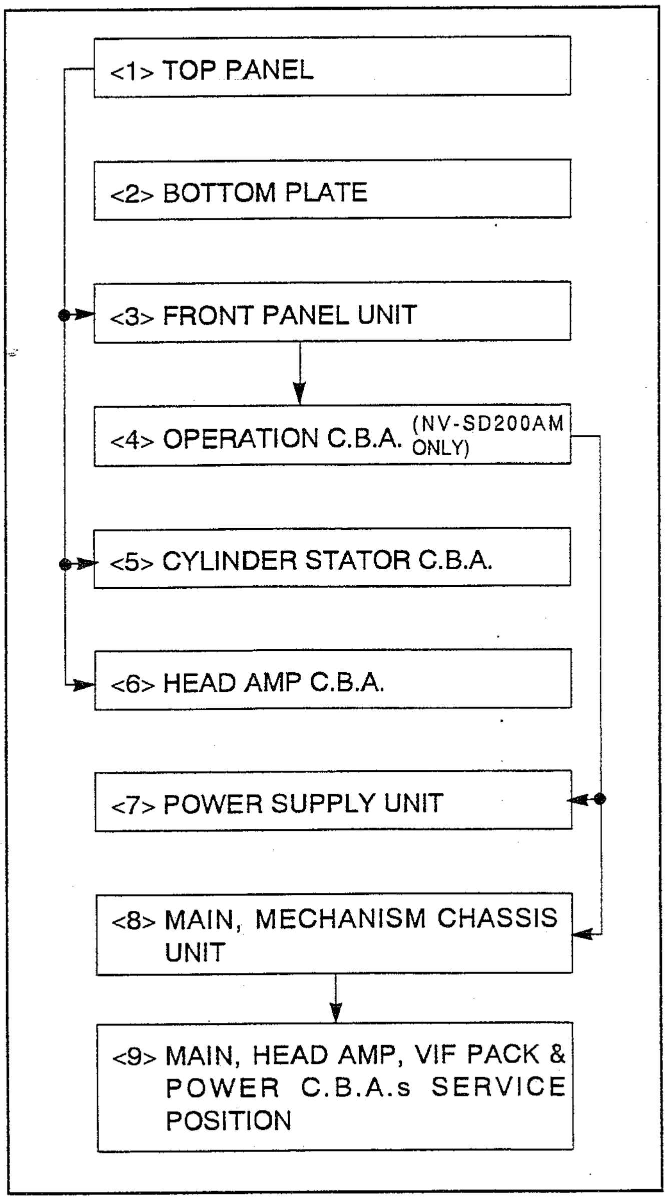

<1> TOP PANEL
<2> BOTTOM PLATE
<3> FRONT PANEL UNIT
<4> OPERATION C.B.A. (NV-SD200AM ONLY)
<5> CYLINDER STATOR C.B.A.
<6> HEAD AMP C.B.A.
<7> POWER SUPPLY UNIT
<8> MAIN, MECHANISM CHASSIS UNIT
<9> MAIN, HEAD AMP, VIF PACK & POWER C.B.A.s SERVICE POSITION

Fig. D1

<1> REMOVAL OF THE TOP PANEL

Remove .... 2 Screws (A)

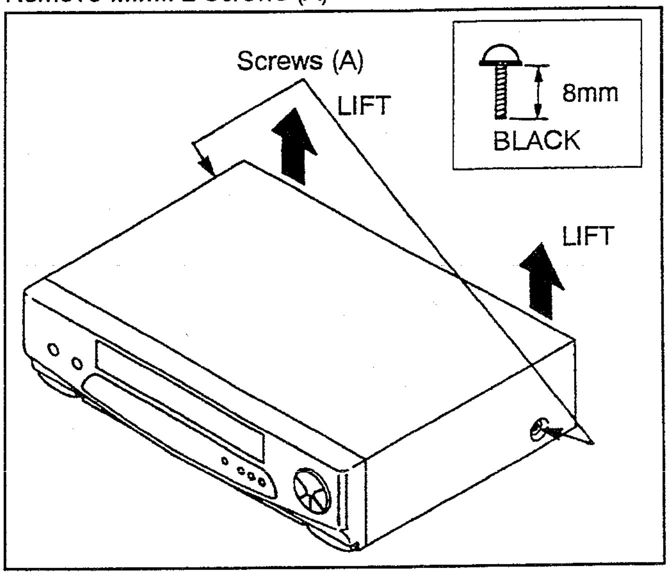

Screws (A)
LIFT
8mm
BLACK
LIFT

Fig. D2

<2> REMOVAL OF THE BOTTOM PLATE

Unlock .... 6 Tabs (B)

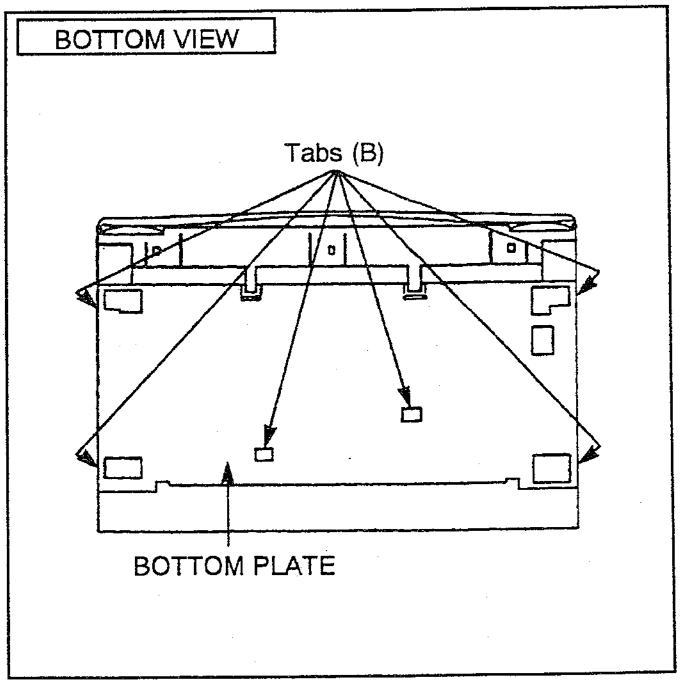

BOTTOM VIEW
Tabs (B)
BOTTOM PLATE

Fig. D3

<3> REMOVAL OF THE FRONT PANEL UNIT

Unlock............ 9 Tabs (C)

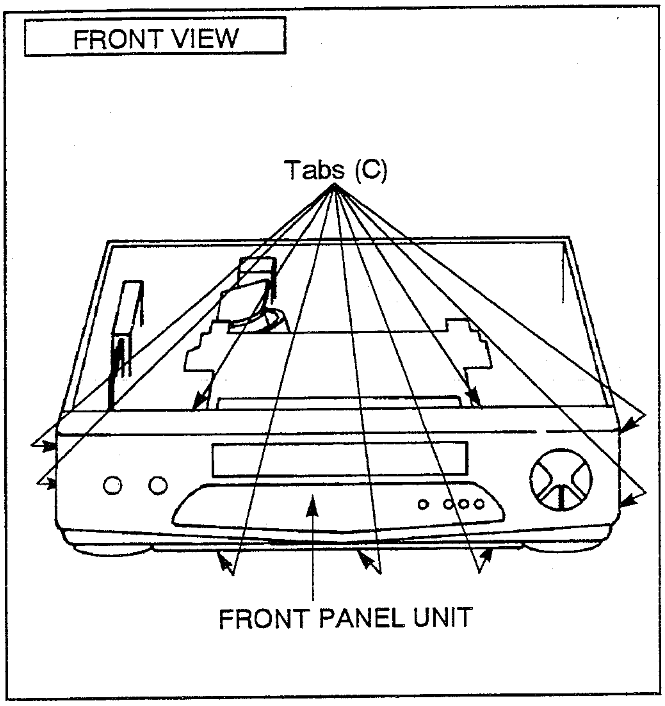

FRONT VIEW
Tabs (C)
FRONT PANEL UNIT

Fig. D4

<4> REMOVAL OF THE OPERATION C.B.A. (NV-SD200AM ONLY)

Disconnect ..... Connector (D)
Unlock............ Tab (E)

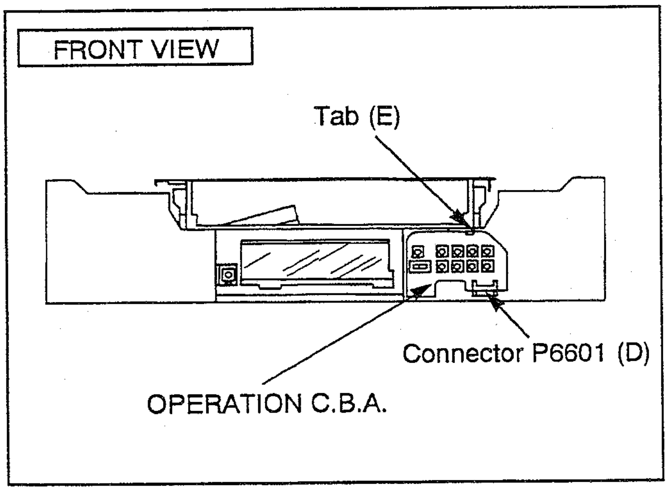

FRONT VIEW
Tab (E)
Connector P6601 (D)
OPERATION C.B.A.

Fig. D5

<5> REMOVAL OF THE CYLINDER STATOR C.B.A.

Remove .... 2 Screws (F)

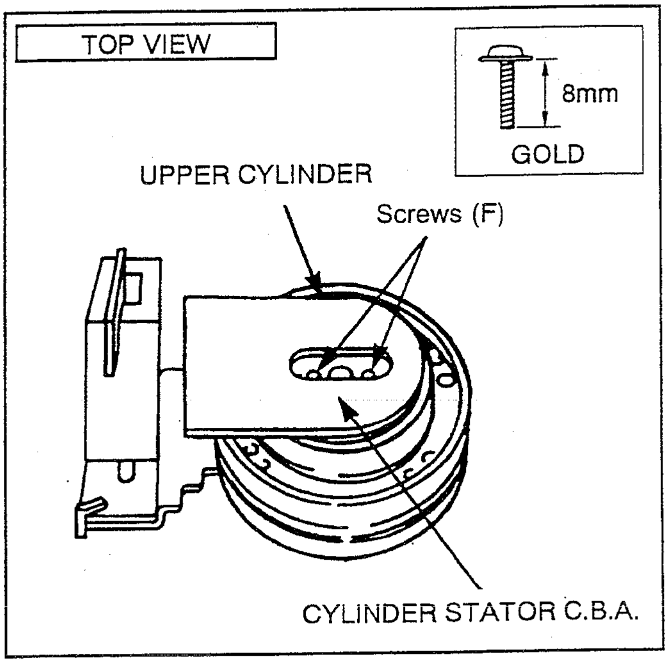

TOP VIEW
8mm
GOLD
UPPER CYLINDER
Screws (F)
CYLINDER STATOR C.B.A.

Fig. D6

<6> REMOVAL OF THE HEAD AMP C.B.A.

Remove .... Screw (G)
Disconnect ..... Connector (H)

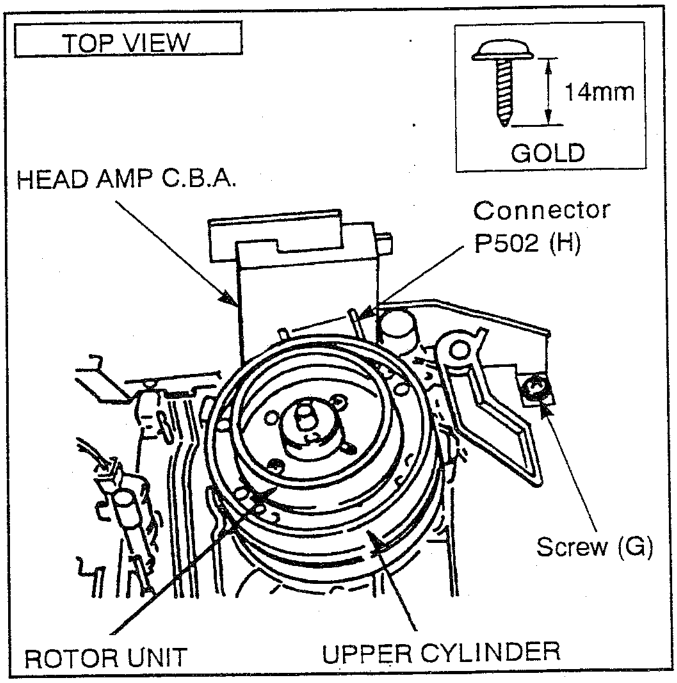

TOP VIEW
14mm
GOLD
HEAD AMP C.B.A.
Connector P502 (H)
Screw (G)
ROTOR UNIT
UPPER CYLINDER

Fig. D7

<7> REMOVAL OF THE POWER SUPPLY UNIT

Unlock............ 3 Tabs (I)
Unlock............ 2 Tabs (J)
Disconnect..... Bridge connector (K)

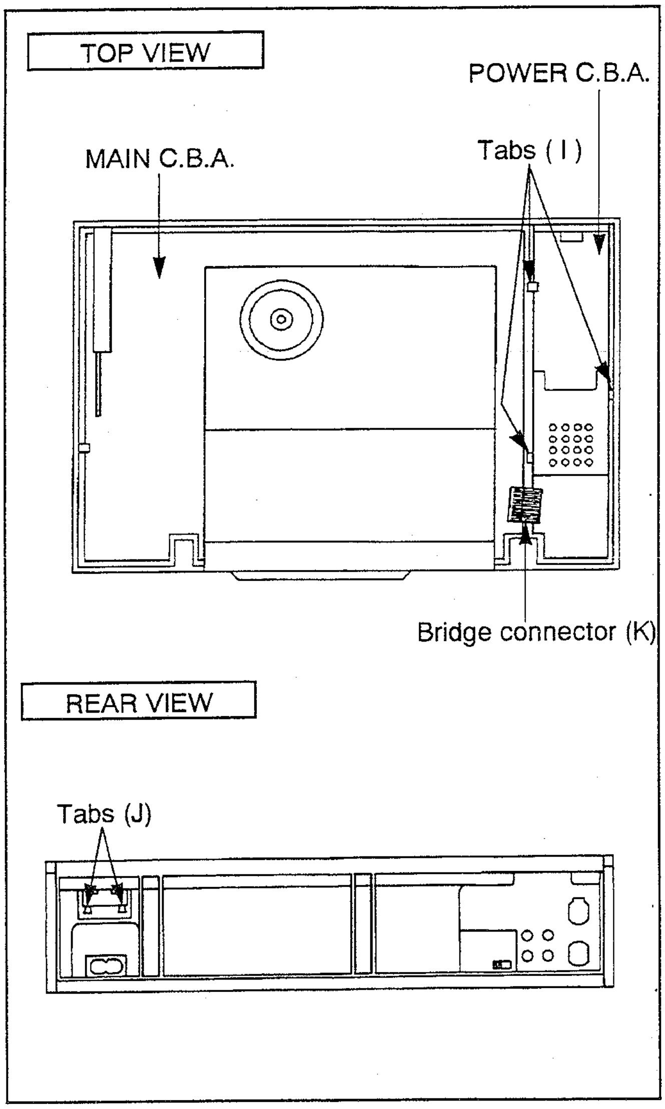

TOP VIEW
POWER C.B.A.
MAIN C.B.A.
Tabs (I)
Bridge connector (K)
REAR VIEW
Tabs (J)

Fig. D8

<8> REMOVAL OF THE MAIN C.B.A. & MECHANISM CHASSIS UNIT

MECHANISM UNIT
Remove .... 3 Screws (L)

MAIN C.B.A.
Unlock............ 2 Tabs (M)

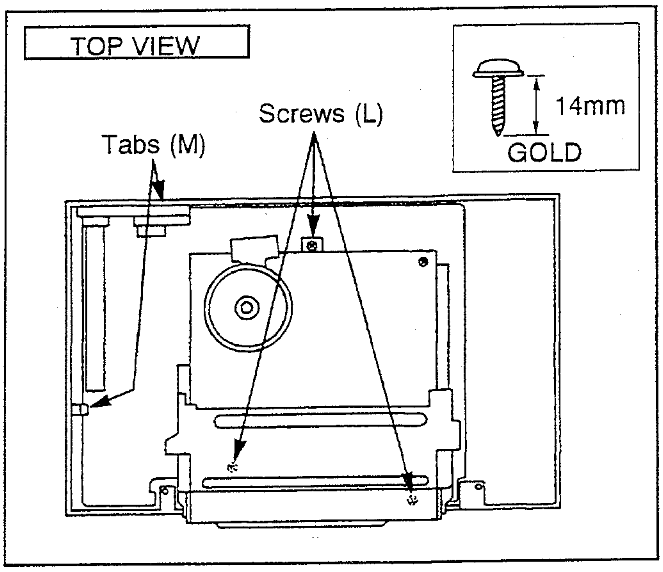

TOP VIEW
Screws (L)
Tabs (M)
14mm
GOLD

Fig. D9

<9> MAIN, HEAD AMP, VIF PACK, OPERATION & POWER C.B.A.s SERVICE POSITION

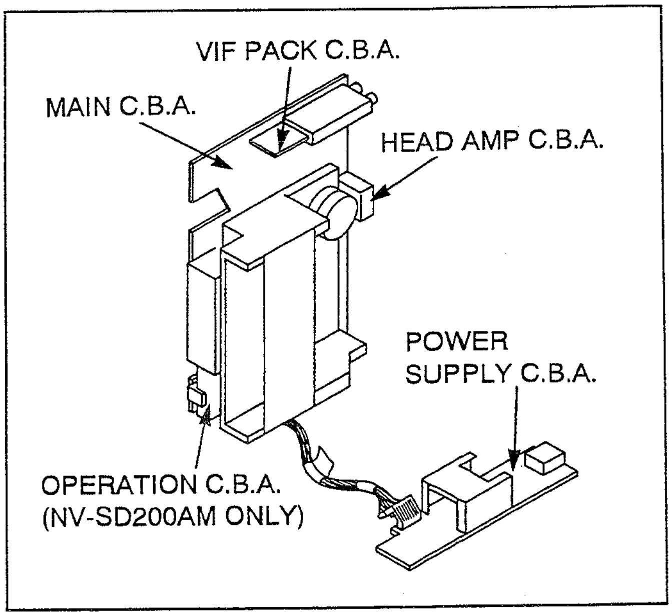

VIF PACK C.B.A.
MAIN C.B.A.
HEAD AMP C.B.A.
POWER
SUPPLY C.B.A.
OPERATION C.B.A.
(NV-SD200AM ONLY)

Fig. D10

2-2. MECHANICAL ADJUSTMENT PROCEDURES

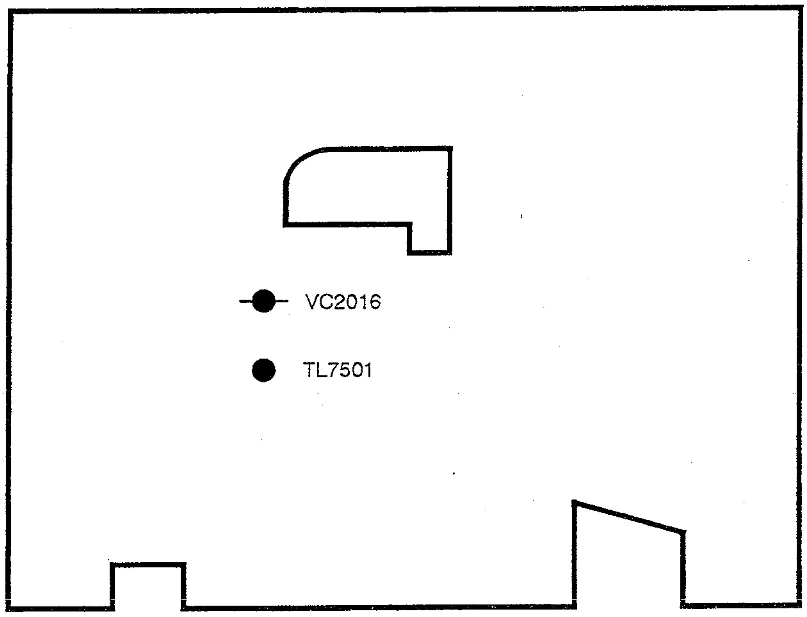
Refer to the K-Mechanism Service Manual (Order No.:VRD9307M131).

CAUTIONS:

To turn on the Adjustment Mode for Tape Interchangeability, connect a Jumper Wire between TL6010 and TL6011(SERV). (Auto Tracking is Turned off.)
After finishing the adjustment, disconnect the Cut Jumper Wire.

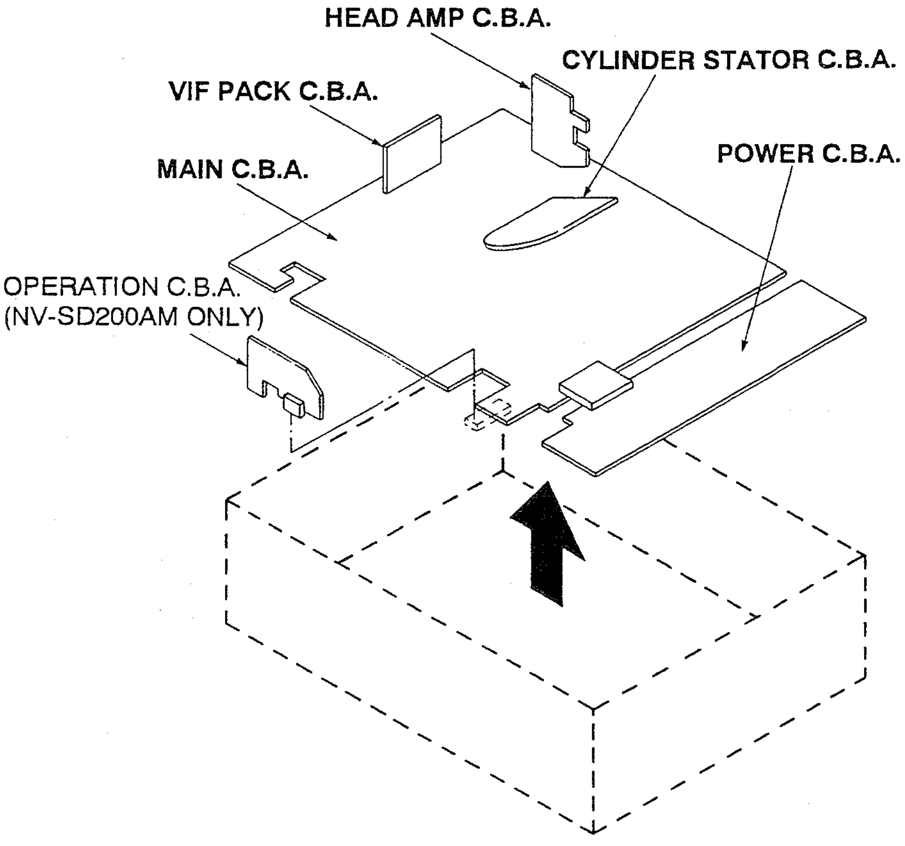
LOCATION OF TEST POINTS & CONTROLS

MAIN C.B.A.



VC2016
TL7501

CIRCUIT BOARD LAYOUT



HEAD AMP C.B.A.
CYLINDER STATOR C.B.A.
VIF PACK C.B.A.
MAIN C.B.A.
POWER C.B.A.
OPERATION C.B.A.
(NV-SD200AM ONLY)

2-3. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VCR.

2-3-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

1. Universal Counter.
2. VHS Alignment Tape. (VFJ8125H3F)
3. Plastic Tip Driver.
4. Monitor

2-3-2. HOW TO READ ADJUSTMENT PROCEDURES

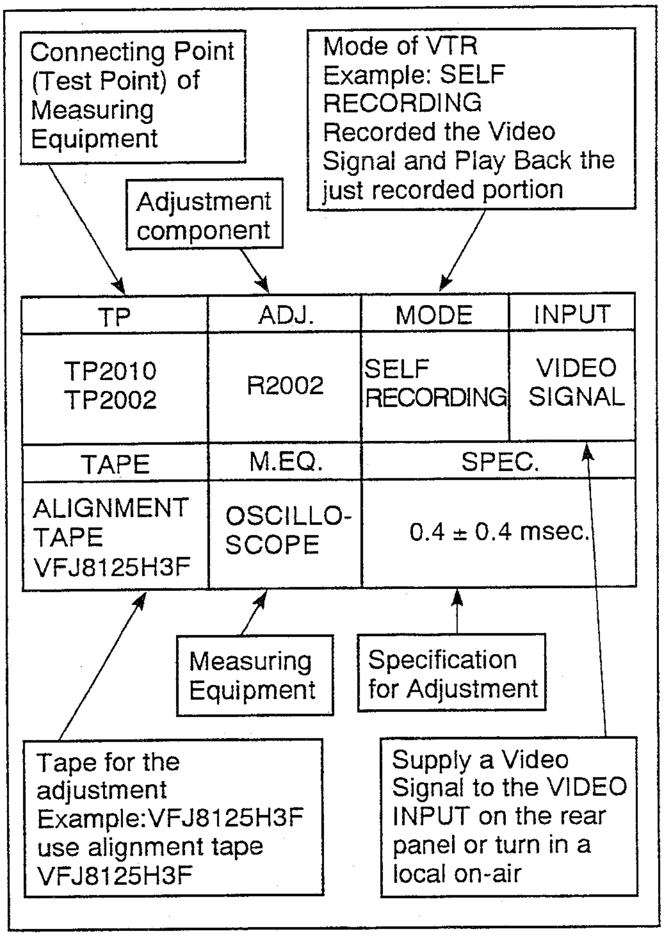
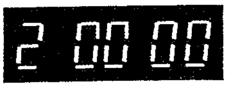
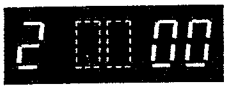
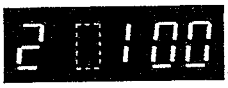
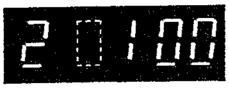
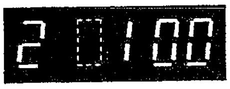

Connecting Point (Test Point) of Measuring Equipment
Mode of VTR Example: SELF RECORDING Recorded the Video Signal and Play Back the just recorded portion
Adjustment component
TP
ADJ.
MODE
INPUT
TP2010 TP2002
R2002
SELF RECORDING
VIDEO SIGNAL
TAPE
M.EQ.
SPEC.
ALIGNMENT TAPE VFJ8125H3F
OSCILLO-SCOPE
0.4 ± 0.4 msec.
Measuring Equipment
Specification for Adjustment
Tape for the adjustment Example:VFJ8125H3F use alignment tape VFJ8125H3F
Supply a Video Signal to the VIDEO INPUT on the rear panel or turn in a local on-air

Fig.E1

SERVO SECTION

2-3-3. PG SHIFTER ADJUSTMENT

PROCEDURES	DISPLAY
1. To set Service Mode 2, press FF, REW and EJECT buttons simultaneously three times.	
2. Press EJECT button for more than three seconds. Digit of minute is put out light.	
3. Indicate 1 in the digit of minute by pressing the channel up/down buttons. When the channel up button is pressed, 1 will be indicated in the digit of minute.	
4. Insert VHS Alignment Tape (VFJ8125H3F).	
5. This adjustment is automatically started after VCR goes PLAY mode. (During the adjustment, the picture can be observed on the monitor.)	
6. When this adjustment is terminated, the following operation will be activated. Adjustment completed : The tape will be ejected. Adjustment incompleted : Indicates " F20 " Check the Servo/System Control circuit and Cylinder unit.	
7. To release Service Mode 2, press FF, REW and EJECT buttons simultaneously sixth times or turn off the power.	

TIMER SECTION

2-3-4. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL7501	VC2016	STOP	
TAPE	**M.EQ.**	**SPEC.**	
	UNIVERSAL COUNTER	8000.0 ± 0.016 (μsec)	

1. Connect the universal counter to TL7501.
2. Adjust VC2016 so the reading of universal counter is 8000.0 ± 0.016 (μsec).

MEMO

SECTION 3
ABBREVIATIONS & BLOCK DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ	BIL. [H]	BILINGUAL Ⓗ
A. COMP	AUDIO COMPONENT SIGNAL	BIL/M1 [L]	BILINGUAL Ⓛ
A. COMPO	AUDIO COMPONENT SIGNAL	BS CLOCK	BS CLOCK
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ	BS DATA	BS DATA
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ	BS LCH IN	BS L CHANNEL INPUT
A. DEF [S]	AUDIO DEFEAT	BS MIX [H]	BS MIX Ⓗ
A.DEF [S] [L]	AUDIO DEFEAT	BS MON [H]	BS MONITOR Ⓗ
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ	BS MONI [H]	BS MONITOR Ⓗ
A. DUB [H]	AUDIO DUBBING Ⓗ	BS RCH IN	BS R CHANNEL INPUT
A. ERASE	AUDIO ERASE	BS VIDEO	BS VIDEO SIGNAL
A. H. SW	AUDIO HEAD SWITCHING PULSE	BS VIDEO/BS1	BS VIDEO SIGNAL
A. HEAD [R]	AUDIO HEAD (REC)	BS [H]	BS Ⓗ
A. HEAD [W]	AUDIO HEAD (PLAY)	BS. LEVEL	BS LEVEL
A. IN [L]	AUDIO INPUT (L)	BS. M [H]	BS MONITOR Ⓗ
A. IN [R]	AUDIO INPUT (R)	BS/VTR [H]	BS/VTR Ⓗ
A. MUT [H]	AUDIO MUTE Ⓗ	BUS CLK	BUS CLOCK
A. MUTE [H]	AUDIO MUTE Ⓗ	BUS LSN	BUS LISTEN
A. OUT [L]	AUDIO OUTPUT (L)	BUS TLK	BUS TALK
A. OUT [R]	AUDIO OUTPUT (R)	BUZZER	BUZZER
A. RF OUT	AUDIO RF SIGNAL OUTPUT	CAP EC	CAPSTAN TORQUE CONTROL
A/VS/S. DATA	AV SW/SERIAL DATA	CAP M GND	CAPSTAN MOTOR GND
AC ONLINE	AC ONLINE	CAP. ET	CAPSTAN TORQUE CONTROL
AC. O/EE. H	AC ONLINE/EE Ⓗ	CAP. FG1	CAPSTAN FG1 PULSE
AFC S C	AFC S CURVE	CAP. FG2	CAPSTAN FG2 PULSE
AFC [S]	AFC S CURVE	CAS. SW	CASSETTE SW
AFC. DEF	AFC DEFEAT	CCN	PLAYBACK CONTROL SIGNAL (−)
ARFC OUT	AUDIO RF SIGNAL OUTPUT	CCP	PLAYBACK CONTROL SIGNAL (+)
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL	CHM	CONTROL SIGNAL (+)
ART. V. MM	ARTIFICIAL VERTICAL SYNC	CHP	CONTROL SIGNAL (−)
	SIGNAL MONO MULTI	CINEM [L]	CINEMA Ⓛ
ART. V/H/N	ARTIFICIAL VERTICAL SYNC	CINEMA [L]	CINEMA Ⓛ
	SIGNAL Ⓗ / NORMAL	CINEMA/MIX	CINEMA/MIX
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL	CKL	RATCH LOCK
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE	CKS	SHIFT LOCK
AUDIO IN [L]	AUDIO INPUT (L)	CL	CLOCK
AUDIO IN [R]	AUDIO INPUT (R)	CLK	CLOCK
AUDIO OUT [L]	AUDIO OUTPUT (L)	CLK (C.G)	CLOCK
AUDIO OUT [R]	AUDIO OUTPUT (R)	CLOCK. IN	CLOCK INPUT
AUDIO SELECT [H]	AUDIO SELECT Ⓗ	CLP	CLAMP
AUDIO. L	AUDIO (L)	COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
AUDIO. R	AUDIO (R)	COLOR [H]	COLOUR Ⓗ
AV CNT	AV CONTROL	CONV	CONVERTOR
AV CTL	AV CONTROL	CS	CHIP SELECT
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK	CTL GND	CONTROL GND
AV. C.M.	AV CONTROL MODE	CTL HEAD [+]	CONTROL HEAD (+)
AVCNT/METER. R	AV CONTROL/LEVEL METER(R)	CTL HEAD [−]	CONTROL HEAD (−)
AVSW/METER. L	AV SW/LEVEL METER (L)	CTL[+]	CONTROL HEAD (+)
B MODE. H	B MODE Ⓗ	CTL[−]	CONTROL HEAD (−)
B.G.P	BURST GATE PULSE	CUE BIAS	CUE BIAS
BACKUP 5V	BACK UP 5V	CURRENT LIM	CURRENT LIMMITER
BAND. U.E.	BAND U	CYL ET	CYLINDER TORQUE CONTROL
BANDVL. D	BAND VL	CYL GND	CYLINDER GND
BI/MI [L]	BILINGUAL/MIX Ⓛ	D.F.M. REC [H]	DELAYED FM RECORDING Ⓗ
BIL	BILINGUAL	D. FM REC [L]	DELAYED FM RECORDING Ⓛ
BIL [L]	BILINGUAL Ⓛ	D. GND	DIGITAL GND

ABBREVIATIONS

D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ /INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/ LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FAST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJ.	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOGUE)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V

H.SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEDA PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [−]	HEATER (−)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [−]	HEATER (−)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA 1	INPUT SELECT A1 POSITION
IN SELA 2	INPUT SELECT A2 POSITION
IN SELA 3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)
LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ

LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMUM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ /BILINGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ /CINEMA SOUND Ⓛ
MIX/ CINE	MIX Ⓗ /CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ /CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ /MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ /MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ /MAIN Ⓛ
MONO2 [L]	MONAURAL 2 Ⓛ
MONO2/MESE[FM(L)]	MONAURAL 2/MESECAM(FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING Ⓛ
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ /4.43 NTSC Ⓜ /3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT
P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ

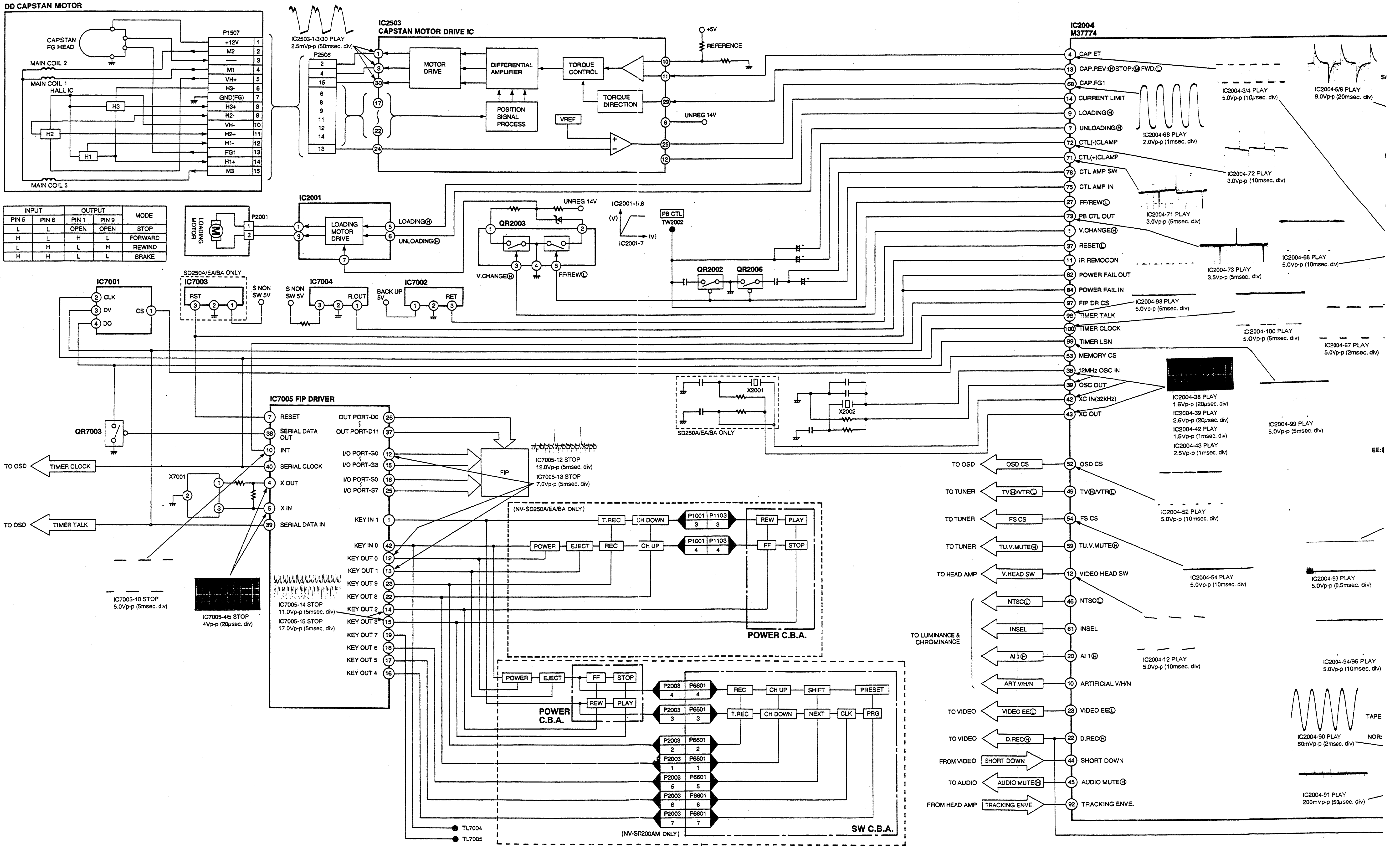
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ /NTSC Ⓗ
PB ADJ. OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN + B	PHOTO SENSOR + B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R.LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ /STOP Ⓜ /FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE(TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOTOR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [−]	REVIEW MOTOR (−)
REV. M. GND	REVIEW MOTOR GND
RF.CHROMA	RF CHROMINANCE SIGNAL
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

ABBREVIATIONS

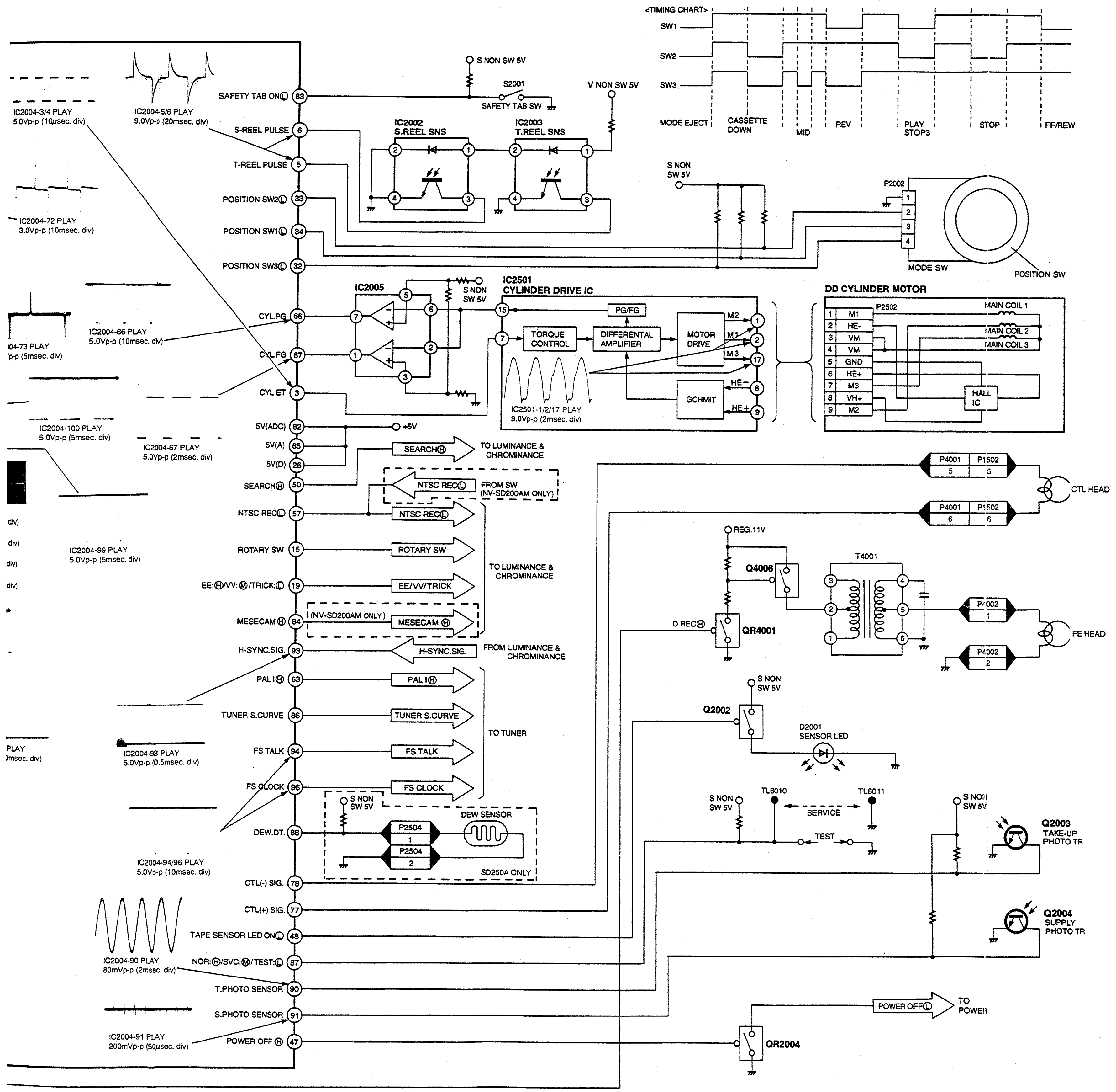
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA / AUDIO
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S.TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ /NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP Ⓛ
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL : ST	STOP 1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2 / S-TAB	STOP POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE

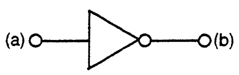
T.BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ /CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRICK PLAY Ⓛ
TRICK [L]	TRICK PLAY Ⓛ
TRK. ENV	AUDIO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG 19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	RERERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

3-2. SYSTEM CONTROL & SERVO SECTION BLOCK DIAGRAM

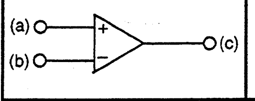

DD CAPSTAN MOTOR
CAPSTAN FG HEAD
MAIN COIL 2
MAIN COIL 1
HALL IC
H3
H2
H1
MAIN COIL 3
P1507
+12V 1
M2 2
— 3
M1 4
VH+ 5
H3- 6
GND(FG) 7
H3+ 8
H2- 9
VH- 10
H2+ 11
H1- 12
FG1 13
H1+ 14
M3 15
IC2503-1/3/30 PLAY
2.5mVp-p (50msec. div)
P2506
2
4
15
6
8
9
11
12
14
13
IC2503
CAPSTAN MOTOR DRIVE IC
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
POSITION SIGNAL PROCESS
TORQUE CONTROL
TORQUE DIRECTION
VREF
+5V
REFERENCE
UNREG 14V
LOADING MOTOR
M
P2001
IC2001
LOADING MOTOR DRIVE
LOADINGⒽ
UNLOADINGⒽ
UNREG 14V
QR2003
V.CHANGEⒽ
FF/REWⓁ
IC2001-5.6
(V)
IC2001-7
PB CTL
TW2002
QR2002
QR2006
IC7001
CLK
DV
DO
CS
SD250A/EA/BA ONLY
IC7003
RST
S NON SW 5V
IC7004
R.OUT
BACK UP 5V
IC7002
RET
QR7003
TO OSD
TIMER CLOCK
X7001
TO OSD
TIMER TALK
IC7005-10 STOP
5.0Vp-p (5msec. div)
IC7005-4/5 STOP
4Vp-p (20μsec. div)
IC7005 FIP DRIVER
RESET
SERIAL DATA OUT
INT
SERIAL CLOCK
X OUT
X IN
SERIAL DATA IN
OUT PORT-D0
OUT PORT-D11
I/O PORT-G0
I/O PORT-G3
I/O PORT-S0
I/O PORT-S7
KEY IN 1
KEY IN 0
KEY OUT 0
KEY OUT 1
KEY OUT 9
KEY OUT 8
KEY OUT 2
KEY OUT 3
KEY OUT 7
KEY OUT 6
KEY OUT 5
KEY OUT 4
FIP
IC7005-12 STOP
12.0Vp-p (5msec. div)
IC7005-13 STOP
7.0Vp-p (5msec. div)
IC7005-14 STOP
11.0Vp-p (5msec. div)
IC7005-15 STOP
17.0Vp-p (5msec. div)
SD250A/EA/BA ONLY
X2001
X2002
(NV-SD250A/EA/BA ONLY)
T.REC
CH DOWN
P1001
P1103
REW
PLAY
POWER
EJECT
REC
CH UP
FF
STOP
POWER C.B.A.
POWER
EJECT
FF
STOP
REW
PLAY
POWER C.B.A.
P2003
P6601
REC
CH UP
SHIFT
PRESET
T.REC
CH DOWN
NEXT
CLK
PRG
TL7004
TL7005
(NV-SD200AM ONLY)
SW C.B.A.
IC2004
M37774
CAP ET
CAP.REV:ⒽSTOP:Ⓜ FWD:Ⓛ
CAP.FG1
CURRENT LIMIT
LOADINGⒽ
UNLOADINGⒽ
CTL(-)CLAMP
CTL(+)CLAMP
CTL AMP SW
CTL AMP IN
FF/REWⓁ
PB CTL OUT
V.CHANGEⒽ
RESETⓁ
IR REMOCON
POWER FAIL OUT
POWER FAIL IN
FIP DR CS
TIMER TALK
TIMER CLOCK
TIMER LSN
MEMORY CS
12MHz OSC IN
OSC OUT
XC IN(32kHz)
XC OUT
OSD CS
TVⒽ/VTRⓁ
FS CS
TU.V.MUTEⒽ
VIDEO HEAD SW
NTSCⓁ
INSEL
AI 1Ⓗ
ARTIFICIAL V/H/N
VIDEO EEⓁ
D.RECⒽ
SHORT DOWN
AUDIO MUTEⒽ
TRACKING ENVE.
TO OSD
TO TUNER
TO TUNER
TO TUNER
TO HEAD AMP
TO LUMINANCE & CHROMINANCE
TO VIDEO
TO VIDEO
FROM VIDEO
TO AUDIO
FROM HEAD AMP
IC2004-68 PLAY
2.0Vp-p (1msec. div)
IC2004-3/4 PLAY
5.0Vp-p (10μsec. div)
IC2004-5/6 PLAY
9.0Vp-p (20msec. div)
IC2004-72 PLAY
3.0Vp-p (10msec. div)
IC2004-71 PLAY
3.0Vp-p (5msec. div)
IC2004-73 PLAY
3.5Vp-p (5msec. div)
IC2004-66 PLAY
5.0Vp-p (10msec. div)
IC2004-98 PLAY
5.0Vp-p (5msec. div)
IC2004-100 PLAY
5.0Vp-p (5msec. div)
IC2004-67 PLAY
5.0Vp-p (2msec. div)
IC2004-38 PLAY
1.6Vp-p (20μsec. div)
IC2004-39 PLAY
2.6Vp-p (20μsec. div)
IC2004-42 PLAY
1.5Vp-p (1msec. div)
IC2004-43 PLAY
2.5Vp-p (1msec. div)
IC2004-99 PLAY
5.0Vp-p (5msec. div)
IC2004-52 PLAY
5.0Vp-p (10msec. div)
IC2004-54 PLAY
5.0Vp-p (10msec. div)
IC2004-93 PLAY
5.0Vp-p (0.5msec. div)
IC2004-12 PLAY
5.0Vp-p (10msec. div)
IC2004-94/96 PLAY
5.0Vp-p (10msec. div)
IC2004-90 PLAY
80mVp-p (2msec. div)
IC2004-91 PLAY
200mVp-p (50μsec. div)
TAPE
EE:
NOR:
S/

INPUT		OUTPUT		MODE
PIN 5	PIN 6	PIN 1	PIN 9	
L	L	OPEN	OPEN	STOP
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE

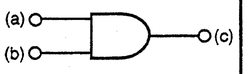

<TIMING CHART>
SW1
SW2
SW3
MODE EJECT
CASSETTE DOWN
MID
REV
PLAY STOP3
STOP
FF/REW
IC2004-3/4 PLAY 5.0Vp-p (10μsec. div)
IC2004-5/6 PLAY 9.0Vp-p (20msec. div)
IC2004-72 PLAY 3.0Vp-p (10msec. div)
04-73 PLAY
'p-p (5msec. div)
IC2004-66 PLAY 5.0Vp-p (10msec. div)
IC2004-100 PLAY 5.0Vp-p (5msec. div)
IC2004-67 PLAY 5.0Vp-p (2msec. div)
div)
div)
div)
div)
IC2004-99 PLAY 5.0Vp-p (5msec. div)
PLAY
)msec. div)
IC2004-93 PLAY 5.0Vp-p (0.5msec. div)
IC2004-94/96 PLAY 5.0Vp-p (10msec. div)
IC2004-90 PLAY 80mVp-p (2msec. div)
IC2004-91 PLAY 200mVp-p (50μsec. div)
SAFETY TAB ON Ⓛ 83
S-REEL PULSE 6
T-REEL PULSE 5
POSITION SW2 Ⓛ 33
POSITION SW1 Ⓛ 34
POSITION SW3 Ⓛ 32
CYL.PG 66
CYL.FG 67
CYL ET 3
5V(ADC) 82
5V(A) 65
5V(D) 26
SEARCH Ⓗ 50
NTSC REC Ⓛ 57
ROTARY SW 15
EE:Ⓗ/VV:Ⓜ/TRICK:Ⓛ 19
MESECAM Ⓗ 64
H-SYNC.SIG. 93
PAL I Ⓗ 63
TUNER S.CURVE 86
FS TALK 94
FS CLOCK 96
DEW.DT. 88
CTL(-) SIG. 78
CTL(+) SIG. 77
TAPE SENSOR LED ON Ⓛ 48
NOR:Ⓗ/SVC:Ⓜ/TEST:Ⓛ 87
T.PHOTO SENSOR 90
S.PHOTO SENSOR 91
POWER OFF Ⓗ 47
S NON SW 5V
S2001
SAFETY TAB SW
V NON SW 5V
IC2002 S.REEL SNS
IC2003 T.REEL SNS
S NON SW 5V
P2002
MODE SW
POSITION SW
IC2005
S NON SW 5V
IC2501 CYLINDER DRIVE IC
PG/FG
TORQUE CONTROL
DIFFERENTAL AMPLIFIER
MOTOR DRIVE
GCHMIT
M2
M1
M3
HE−
HE+
IC2501-1/2/17 PLAY 9.0Vp-p (2msec. div)
DD CYLINDER MOTOR
P2502
1 M1
2 HE-
3 VM
4 VM
5 GND
6 HE+
7 M3
8 VH+
9 M2
MAIN COIL 1
MAIN COIL 2
MAIN COIL 3
HALL IC
+5V
SEARCH Ⓗ
TO LUMINANCE & CHROMINANCE
NTSC REC Ⓛ
FROM SW (NV-SD200AM ONLY)
NTSC REC Ⓛ
ROTARY SW
EE/VV/TRICK
TO LUMINANCE & CHROMINANCE
(NV-SD200AM ONLY)
MESECAM Ⓗ
H-SYNC.SIG.
FROM LUMINANCE & CHROMINANCE
PAL I Ⓗ
TUNER S.CURVE
FS TALK
FS CLOCK
TO TUNER
S NON SW 5V
DEW SENSOR
P2504 1
P2504 2
SD250A ONLY
P4001 5
P1502 5
P4001 6
P1502 6
CTL HEAD
REG.11V
Q4006
T4001
D.REC Ⓗ
QR4001
P4002 1
P4002 2
FE HEAD
S NON SW 5V
Q2002
D2001 SENSOR LED
S NON SW 5V
TL6010
TL6011
SERVICE
TEST
S NON SW 5V
Q2003 TAKE-UP PHOTO TR
Q2004 SUPPLY PHOTO TR
POWER OFF Ⓛ
TO POWER
QR2004

<table>
<tr><th>SYMBOL</th><th>TRUTH VALUE TABLE</th></tr>
<tr><td>INVERTER
 </td><td>

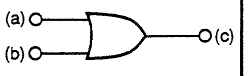
IN	(a)	H	L
OUT	(b)	L	H

</td></tr>
<tr><td>COMPARTOR
 </td><td>

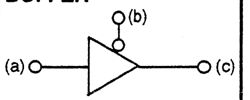
IN	(a)/(b)	(a)>(b)	(a)<(b)
OUT	(c)	H	L

</td></tr>
<tr><td>AND CIRCUIT
 </td><td>

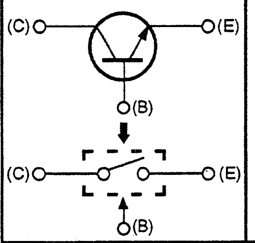
IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	L	L	H

</td></tr>
<tr><td>OR CIRCUIT
 </td><td>

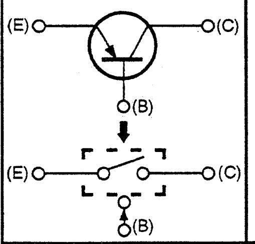
IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	H	H	H

</td></tr>
<tr><td>THREE STATES BUFFER
 </td><td>

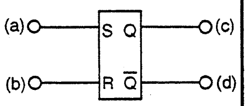
IN	(a)	H	L	H or L
	(b)	L	L	H
OUT	(c)	H	L	※

※ High impedance</td></tr>
<tr><td>TR. SW (NPN TYPE)
 </td><td>

BASE	H	L
TR. SW	ON	OFF

</td></tr>
<tr><td>TR. SW (PNP TYPE)
 </td><td>

BASE	H	L
TR. SW	OFF	ON

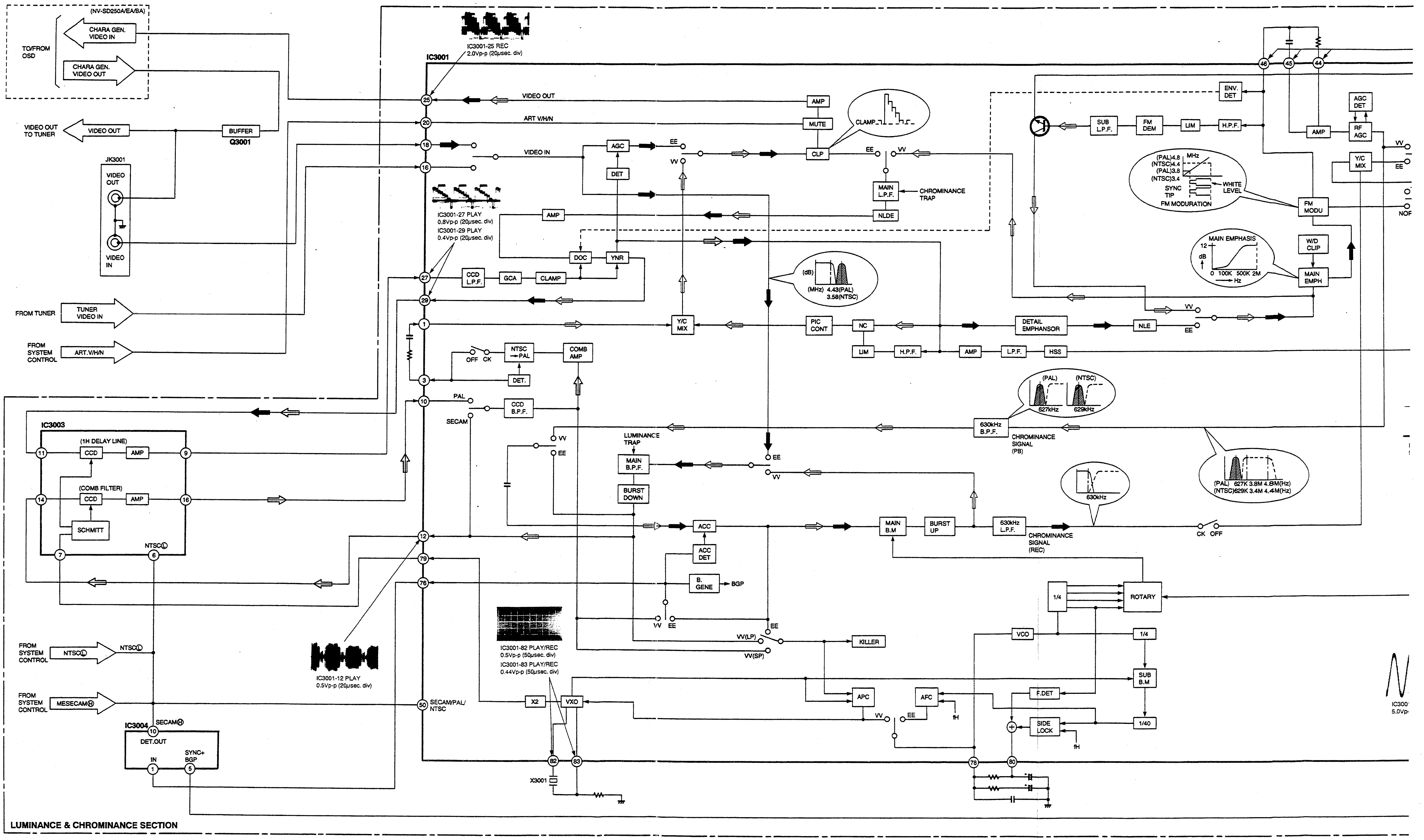
</td></tr>
<tr><td>R-S TYPE FLIP-FLOP
 </td><td>

IN	(a)	L	L	⎍
	(b)	L	⎍	L
OUT	(c)	※	L	H
	(d)	◆	H	L

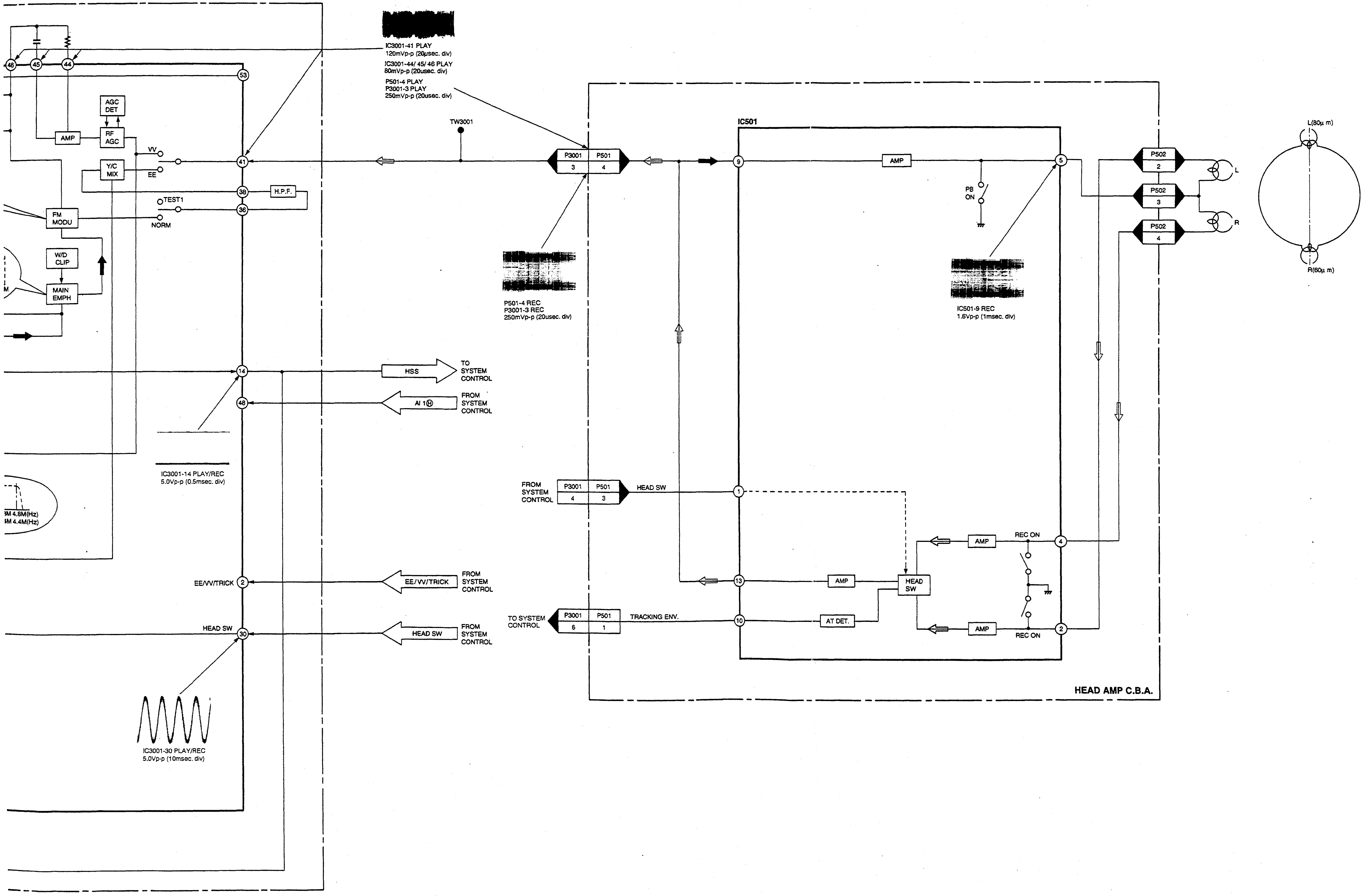
※ Initial condition is maintained.
◆ Initial condition is reversed.</td></tr>
</table>

3-3. LUMINANCE & CHROMINANCE SECTION BLOCK DIAGRAM

⇦ VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

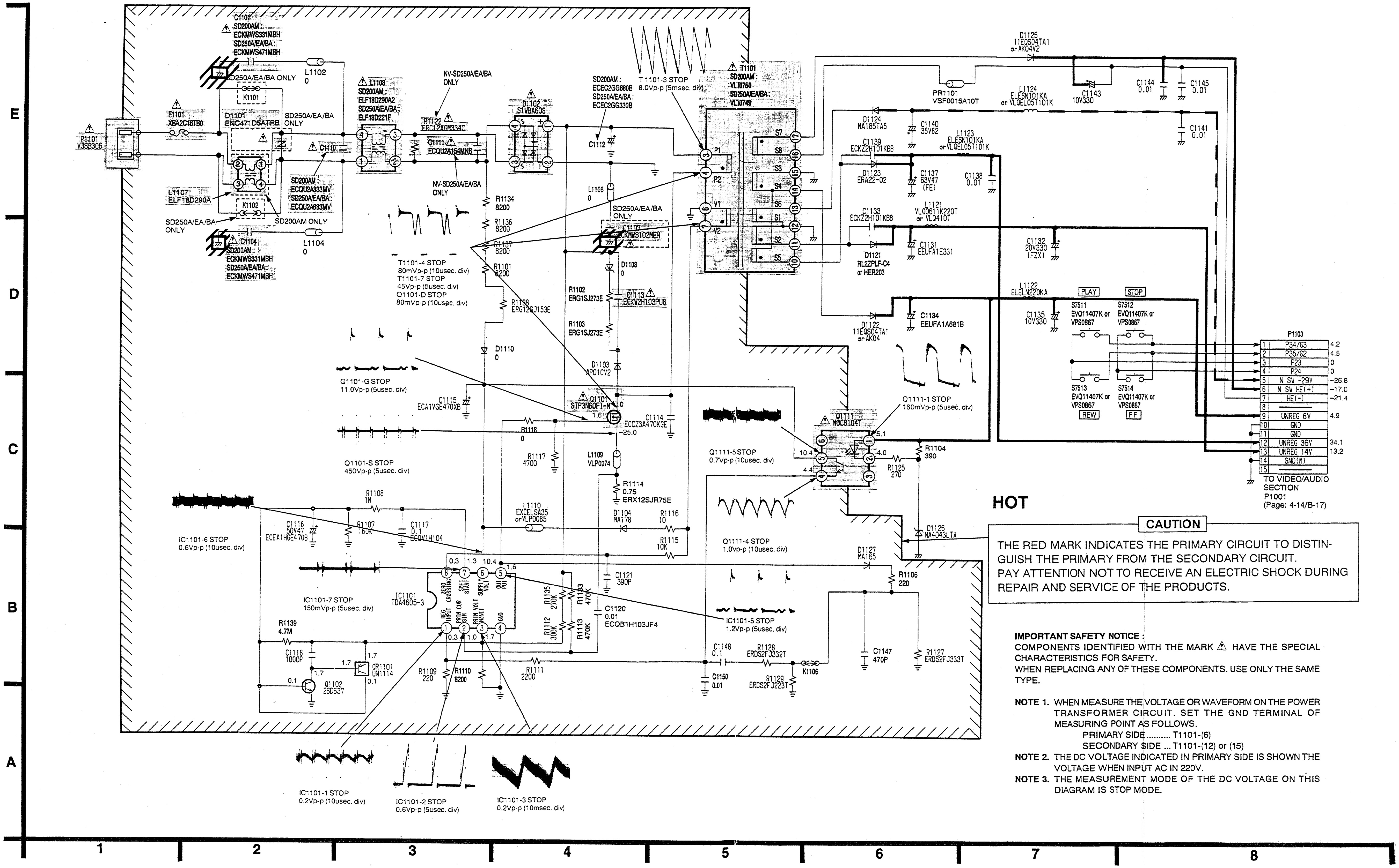

(NV-SD250A/EA/BA)
TO/FROM OSD
CHARA GEN. VIDEO IN
CHARA GEN. VIDEO OUT
VIDEO OUT TO TUNER
VIDEO OUT
BUFFER
Q3001
JK3001
VIDEO OUT
VIDEO IN
FROM TUNER
TUNER VIDEO IN
FROM SYSTEM CONTROL
ART.V/H/N
IC3001-25 REC
2.0Vp-p (20μsec. div)
IC3001
VIDEO OUT
ART V/H/N
VIDEO IN
AMP
MUTE
CLP
CLAMP
AGC
DET
EE
VV
MAIN L.P.F.
CHROMINANCE TRAP
NLDE
IC3001-27 PLAY
0.8Vp-p (20μsec. div)
IC3001-29 PLAY
0.4Vp-p (20μsec. div)
DOC
YNR
CCD L.P.F.
GCA
CLAMP
(dB)
(MHz) 4.43(PAL) 3.58(NTSC)
Y/C MIX
PIC CONT
NC
LIM
H.P.F.
L.P.F.
HSS
DETAIL EMPHANSOR
NLE
OFF CK
NTSC →PAL
DET.
COMB AMP
PAL
SECAM
CCD B.P.F.
IC3003
(1H DELAY LINE)
CCD
(COMB FILTER)
SCHMITT
NTSC Ⓛ
LUMINANCE TRAP
MAIN B.P.F.
BURST DOWN
ACC
ACC DET
B. GENE
BGP
MAIN B.M
BURST UP
630kHz L.P.F.
CHROMINANCE SIGNAL (REC)
630kHz B.P.F.
CHROMINANCE SIGNAL (PB)
(PAL) (NTSC)
627kHz 629kHz
630kHz
(PAL) 627K 3.8M 4.8M(Hz)
(NTSC)629K 3.4M 4.4M(Hz)
CK OFF
1/4
ROTARY
VCO
KILLER
VV(LP)
VV(SP)
IC3001-82 PLAY/REC
0.5Vp-p (50μsec. div)
IC3001-83 PLAY/REC
0.44Vp-p (50μsec. div)
IC3001-12 PLAY
0.5Vp-p (20μsec. div)
FROM SYSTEM CONTROL
NTSC Ⓛ
FROM SYSTEM CONTROL
MESECAM Ⓗ
SECAM/PAL/NTSC
X2
VXO
APC
AFC
fH
F.DET
SIDE LOCK
SUB B.M
1/40
IC3004
SECAM Ⓗ
DET.OUT
IN
SYNC+ BGP
X3001
ENV. DET
SUB L.P.F.
FM DEM
LIM
H.P.F.
AGC DET
RF AGC
AMP
Y/C MIX
(PAL)4.8 MHz
(NTSC)4.4
(PAL)3.8
(NTSC)3.4
SYNC TIP
WHITE LEVEL
FM MODURATION
FM MODU
MAIN EMPHASIS
12
dB
0 100K 500K 2M
Hz
W/D CLIP
MAIN EMPH
NOR
IC300
5.0Vp-
LUMINANCE & CHROMINANCE SECTION

⬅ VIDEO MAIN SIGNAL PATH IN REC MODE


46
45
44
53
AGC DET
AMP
RF AGC
VV
EE
41
Y/C MIX
38
H.P.F.
TEST1
36
NORM
FM MODU
W/D CLIP
MAIN EMPH
IC3001-41 PLAY
120mVp-p (20µsec. div)
IC3001-44/ 45/ 46 PLAY
80mVp-p (20usec. div)
P501-4 PLAY
P3001-3 PLAY
250mVp-p (20usec. div)
TW3001
P3001
P501
3
4
P501-4 REC
P3001-3 REC
250mVp-p (20usec. div)
IC501
9
AMP
5
PB ON
IC501-9 REC
1.6Vp-p (1msec. div)
P502
2
3
4
L
R
L(80µ m)
R(60µ m)
14
HSS
TO SYSTEM CONTROL
48
AI 1Ⓗ
FROM SYSTEM CONTROL
IC3001-14 PLAY/REC
5.0Vp-p (0.5msec. div)
M 4.8M(Hz)
M 4.4M(Hz)
FROM SYSTEM CONTROL
P3001
P501
4
3
HEAD SW
1
AMP
REC ON
4
EE/VV/TRICK
2
EE/VV/TRICK
FROM SYSTEM CONTROL
13
AMP
HEAD SW
TO SYSTEM CONTROL
P3001
P501
6
1
TRACKING ENV.
10
AT DET.
AMP
REC ON
2
HEAD SW
30
HEAD SW
FROM SYSTEM CONTROL
IC3001-30 PLAY/REC
5.0Vp-p (10msec. div)
HEAD AMP C.B.A.

SECTION 4
SCHEMATIC DIAGRAMS

4-1. POWER SCHEMATIC DIAGRAM


E
D
C
B
A
1
2
3
4
5
6
7
8
P1101
VJS3306
F1101
XBA2C16TB0
C1101
SD200AM :
ECKMWS331MBH
SD250A/EA/BA :
ECKMWS471MBH
SD250A/EA/BA ONLY
K1101
L1102
0
D1101
ENC471D5ATRB
SD250A/EA/BA
ONLY
C1110
L1107
ELF18D290A
K1102
SD250A/EA/BA
ONLY
SD200AM ONLY
SD200AM :
ECQU2A333MV
SD250A/EA/BA :
ECQU2A683MV
C1104
SD200AM :
ECKMWS331MBH
SD250A/EA/BA :
ECKMWS471MBH
L1104
0
L1108
SD200AM :
ELF18D290A2
SD250A/EA/BA :
ELF18D221F
NV-SD250A/EA/BA
ONLY
R1122
ERC12AGM334C
C1111
ECQU2A154MNB
NV-SD250A/EA/BA
ONLY
D1102
S1WBA60S
SD200AM :
ECEC2GG680B
SD250A/EA/BA :
ECEC2GG330B
C1112
T 1101-3 STOP
8.0Vp-p (5msec. div)
T1101
SD200AM :
VLT0750
SD250A/EA/BA :
VLT0749
P1
P2
V1
V2
S7
S8
S3
S4
S6
S1
S2
S5
R1134
8200
R1136
8200
R1137
8200
R1101
8200
R1138
ERG12SJ153E
T1101-4 STOP
80mVp-p (10usec. div)
T1101-7 STOP
45Vp-p (5usec. div)
Q1101-D STOP
80mVp-p (10usec. div)
L1106
0
SD250A/EA/BA
ONLY
C1107
ECKWS102MEH
D1108
0
R1102
ERG1SJ273E
C1113
ECKW2H103PU8
R1103
ERG1SJ273E
D1110
0
D1103
AP01CV2
Q1101-G STOP
11.0Vp-p (5usec. div)
C1115
ECA1VGE470XB
Q1101
STP3N60FI-M
0
1.6
-25.0
C1114
ECCZ3A470KGE
R1118
0
Q1101-S STOP
450Vp-p (5usec. div)
R1117
4700
L1109
VLP0074
R1114
0.75
ERX12SJR75E
R1108
1M
C1116
50V47
ECEA1HGE470B
R1107
160K
C1117
0.1
ECQV1H104
IC1101-6 STOP
0.6Vp-p (10usec. div)
L1110
EXCELSA35
or VLP0085
D1104
MA178
R1116
10
R1115
10K
IC1101-7 STOP
150mVp-p (5usec. div)
0.3
1.3
10.4
1.6
ZERO CROSSING
SOFT START
SUPPLY VOLT
OUT PUT
REG INPUT
PRIM CUR SIM
PRIM VOLT MONIT
GND
IC1101
TDA4605-3
0.3
1.0
1.7
R1135
270K
R1133
470K
R1112
300K
R1113
470K
C1121
390P
C1120
0.01
ECQB1H103JF4
R1139
4.7M
C1118
1000P
QR1101
UN1114
Q1102
2SD637
1.7
1.7
1.7
0.1
0.1
R1109
220
R1110
8200
R1111
2200
IC1101-1 STOP
0.2Vp-p (10usec. div)
IC1101-2 STOP
0.6Vp-p (5usec. div)
IC1101-3 STOP
0.2Vp-p (10msec. div)
Q1111-5 STOP
0.7Vp-p (10usec. div)
Q1111
MOC8104T
10.4
4.4
5.1
4.0
Q1111-1 STOP
160mVp-p (5usec. div)
R1104
390
R1125
270
Q1111-4 STOP
1.0Vp-p (10usec. div)
D1126
MA4043LTA
D1127
MA165
R1106
220
IC1101-5 STOP
1.2Vp-p (5usec. div)
C1148
0.1
R1128
ERDS2FJ332T
K1106
C1150
0.01
R1129
ERDS2FJ223T
C1147
470P
R1127
ERDS2FJ333T
HOT
D1125
11EQS04TA1
or AK04V2
PR1101
VSF0015A10T
L1124
ELESN101KA
or VLQEL05T101K
C1143
10V330
C1144
0.01
C1145
0.01
D1124
MA185TA5
C1140
35V82
C1141
0.01
C1139
ECKZ2H101KBB
L1123
ELESN101KA
or VLQEL05T101K
D1123
ERA22-02
C1137
63V47
(FE)
C1138
0.01
C1133
ECKZ2H101KBB
L1121
VLQ0611K220T
or VLQ410T
C1131
EEUFA1E331
D1121
RL2ZPLF-C4
or HER203
C1132
20V330
(FZX)
L1122
ELELN220KA
D1122
11EQS04TA1
or AK04
C1134
EEUFA1A681B
C1135
10V330
PLAY
STOP
S7511
EVQ11407K or
VPS0867
S7512
EVQ11407K or
VPS0867
S7513
EVQ11407K or
VPS0867
S7514
EVQ11407K or
VPS0867
REW
FF
P1103
1 P34/G3 4.2
2 P35/G2 4.5
3 P23 0
4 P24 0
5 N SW -29V -26.8
6 N SW HE(+) -17.0
7 HE(-) -21.4
8
9 UNREG 6V 4.9
10 GND
11 GND
12 UNREG 36V 34.1
13 UNREG 14V 13.2
14 GND(M)
15
TO VIDEO/AUDIO
SECTION
P1001
(Page: 4-14/B-17)

CAUTION

THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE :
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT. SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE.......... T1101-(6)
SECONDARY SIDE ... T1101-(12) or (15)

NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IN 220V.

NOTE 3. THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

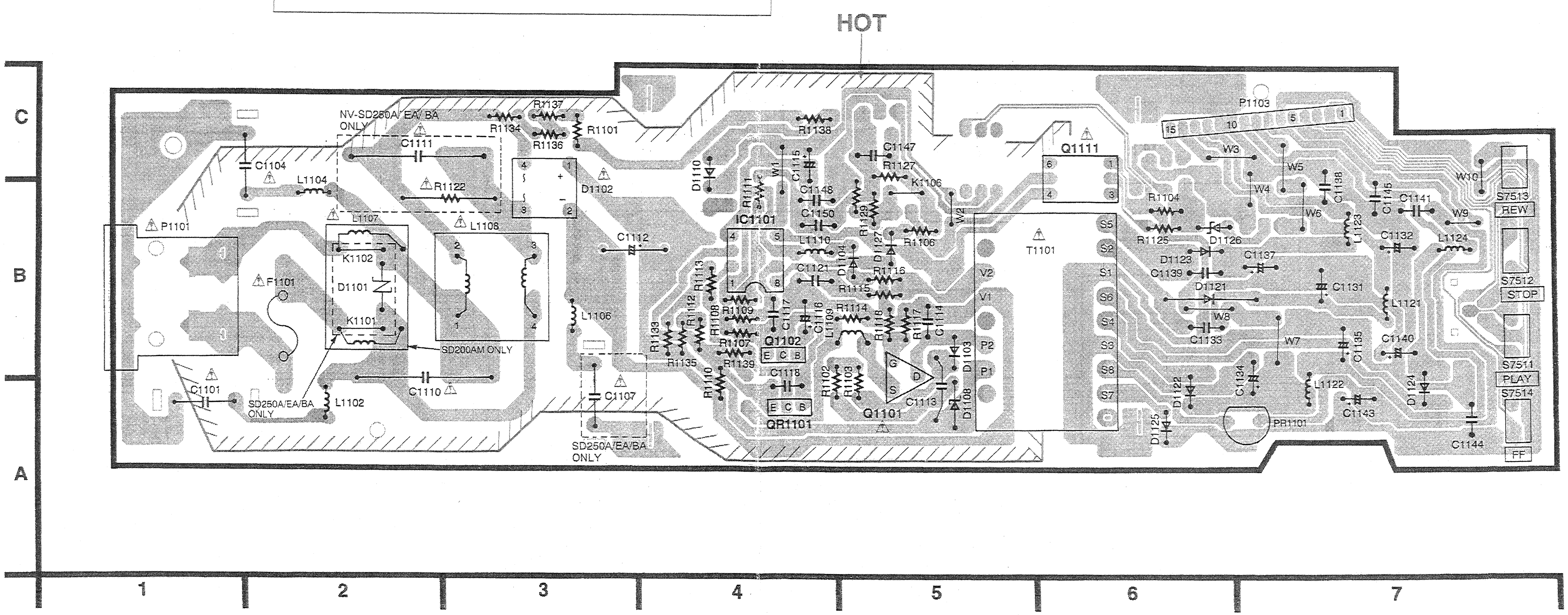
4-2. POWER C.B.A. (VEP01621C : NV-SD200AM) (VEP01621D : NV-SD250A/ EA/ BA)

POWER C. B. A.			
Transistor		Integrated Circuit	
Q1101 Q1002 Q1111	A-5 B-4 B-6	IC1101	B-4
		Connector	
Transistor & Resistor		P1101 P1103	B-1 C-7
QR1101	A-4		

ADDRESS INFORMATION

CAUTION

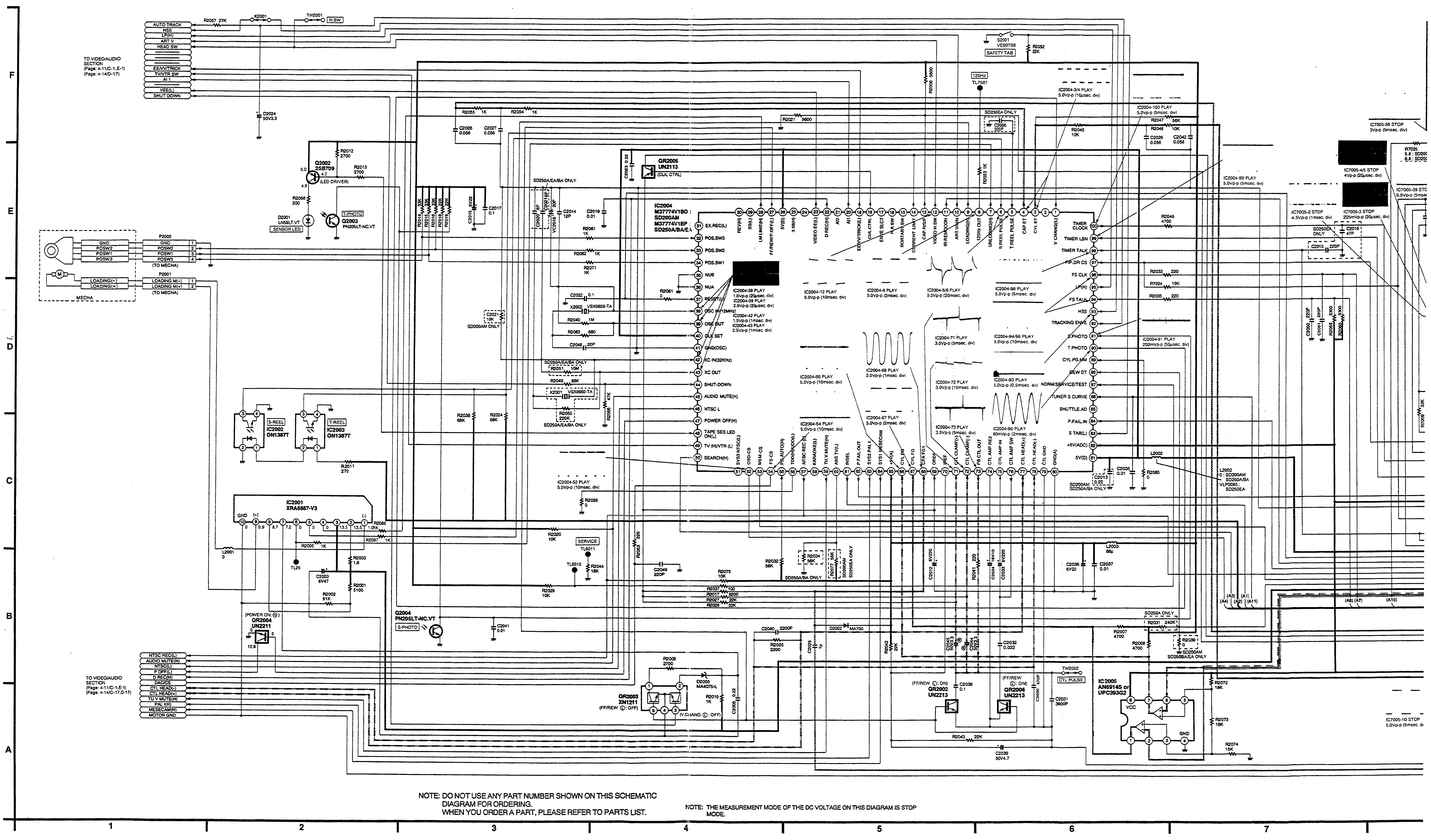
THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.



HOT
C
B
A
1
2
3
4
5
6
7
P1101
F1101
C1101
C1104
L1104
L1102
SD250A/EA/BA ONLY
NV-SD250A/ EA/ BA ONLY
C1111
R1122
L1107
K1102
D1101
K1101
SD200AM ONLY
C1110
R1134
R1137
R1136
R1101
D1102
L1108
L1106
C1112
C1107
SD250A/EA/BA ONLY
D1110
R1111
W1
C1115
C1148
C1150
R1138
C1147
R1127
K1106
R1129
IC1101
L1110
C1121
D1104
D1127
R1106
R1116
R1115
R1113
R1112
R1108
R1133
R1135
R1109
R1107
R1139
C1117
C1116
L1109
R1114
R1118
R1117
C1114
Q1102
E C B
R1110
C1118
QR1101
R1102
R1103
Q1101
G D S
C1113
D1103
D1108
W2
T1101
V2
V1
P2
P1
S5
S2
S1
S6
S4
S3
S8
S7
Q1111
P1103
15
10
5
1
W3
W5
W4
W6
C1138
R1104
R1125
D1126
D1123
C1139
C1137
D1121
W8
C1133
W7
C1131
L1123
C1145
C1141
W9
W10
C1132
L1124
L1121
C1135
C1140
C1134
D1122
D1125
PR1101
L1122
C1143
D1124
C1144
S7513
REW
S7512
STOP
S7511
PLAY
S7514
FF

4-3. SYSTEM CONTROL & SERVO / TIMER / MOTOR DRIVE SECTION IN MAIN SCHEMATIC DIAGRAM

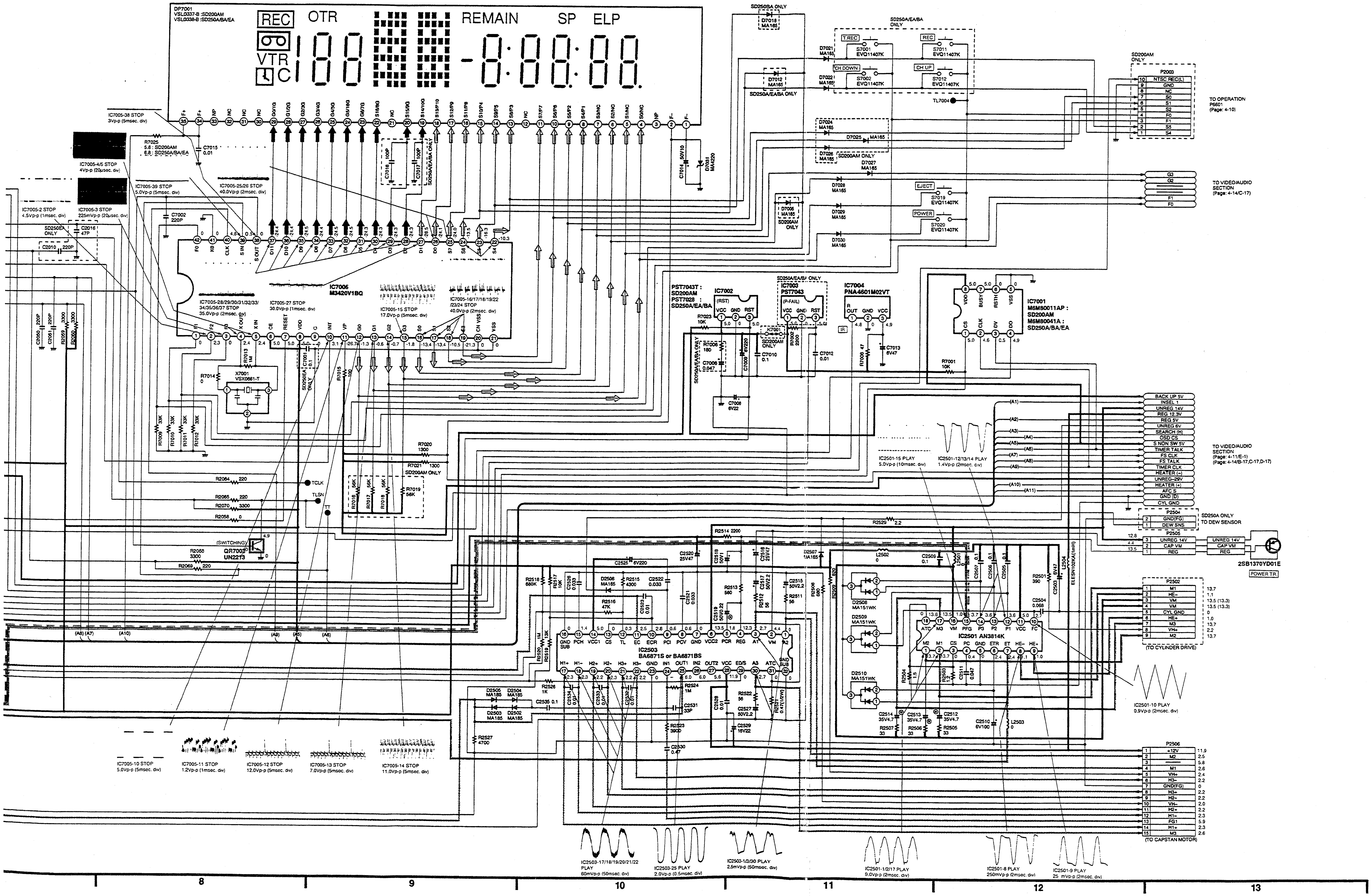
- - - - CYLINDER SERVO PHASE LOOP
——— CYLINDER SERVO SPEED LOOP


TO VIDEO/AUDIO SECTION (Page: 4-11/C-1,E-1) (Page: 4-14/D-17)
AUTO TRACK
HSS
LP(H)
ART V
HEAD SW
EE/VV/TRICK
TV/VTR SW
AI 1
VEE(L)
SHUT DOWN
K2001
TW2001
H.SW
S2001 VES0709
SAFETY TAB
125Hz TL7501
Q2002 2SB709 (LED DRIVER)
D2001 LN59LT.VT SENSOR LED
T-PHOTO
Q2003 PN205LT-NC.VT
P2002
GND
POSW2
POSW1
POSW3
(TO MECHA)
P2001
LOADING M(-)
LOADING M(+)
MECHA
QR2005 UN2113 (CUL CTRL)
IC2004 M37774V1BO : SD200AM M37774V1BP : SD250A/BA/EA
X2002 VSX0659-TA
X2001 VSX0660-TA
S-REEL IC2002 ON1387T
T-REEL IC2003 ON1387T
IC2001 XRA6887-V3
SERVICE TL6011
TL6010
TL26
(POWER ON: H) QR2004 UN2211
Q2004 PN205LT-NC.VT
S-PHOTO
QR2003 XN1211 (FF/REW L: OFF)
D2005 MA4075-L
D2002 MA700
(V.CHANG L: OFF)
(FF/REW L: ON) QR2002 UN2213
(FF/REW L: ON) QR2006 UN2213
TW2002 CTL PULSE
IC2005 AN6914S or UPC393G2
VCC
GND
L2002 0 : SD200AM SD250A/BA VLP0085 : SD250EA
TO VIDEO/AUDIO SECTION (Page: 4-11/C-1,E-1) (Page: 4-14/C-17,D-17)
NTSC REC(L)
AUDIO MUTE(H)
NTSC(L)
P OFF(L)
D REC(H)
DAC/CS
CTL HEAD(-)
CTL HEAD(+)
TU V MUTE(H)
PAL I(H)
MESECAM(H)
MOTOR GND
F
E
D
C
B
A
1
2
3
4
5
6
7

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

DER SERVO SPEED LOOP CAPSTAN SERVO SPEED LOOP CAPSTAN SERVO PHASE LOOP SERMENT CONTROL SIGNAL PATH GRID CONTROL SIGNAL PATH


[redacted]
[redacted]

DP7001
VSL0337-B :SD200AM
VSL0338-B :SD250A/BA/EA
REC
OTR
REMAIN
SP
ELP
VTR
IC7006
M3420V1BQ
IC7002
PST7043T : SD200AM
PST7028 : SD250A/EA/BA
IC7003
PST7043
IC7004
PNA4601M02VT
IC7001
M6M80011AP : SD200AM
M6M80041A : SD250A/BA/EA
X7001
VSX0661-T
QR7003
UN2213
(SWITCHING)
TCLK
TLSN
T.REC
REC
CH DOWN
CH UP
EJECT
POWER
S7001 EVQ11407K
S7002 EVQ11407K
S7011 EVQ11407K
S7012 EVQ11407K
S7019 EVQ11407K
S7020 EVQ11407K
TL7004
P2003
TO OPERATION P6601 (Page: 4-10)
TO VIDEO/AUDIO SECTION (Page: 4-14/C-17)
BACK UP 5V
INSEL 1
UNREG 14V
REG 12.3V
REG 5V
UNREG 6V
SEARCH (H)
OSD CS
S NON SW 5V
TIMER TALK
FS CLK
FS TALK
TIMER CLK
HEATER (−)
UNREG-29V
HEATER (+)
AFC S
GND (D)
CYL GND
TO VIDEO/AUDIO SECTION (Page: 4-11/E-1) (Page: 4-14/B-17,C-17,D-17)
P2504
SD250A ONLY TO DEW SENSOR
P2505
UNREG 14V
CAP VM
REG
2SB1370YD01E
POWER TR
P2502
(TO CYLINDER DRIVE)
IC2503
BA6871S or BA6871BS
IC2501 AN3814K
D2508 MA151WK
D2509 MA151WK
D2510 MA151WK
P2506
(TO CAPSTAN MOTOR)
IC7005-10 STOP 5.0Vp-p (5msec. div)
IC7005-11 STOP 1.2Vp-p (1msec. div)
IC7005-12 STOP 12.0Vp-p (5msec. div)
IC7005-13 STOP 7.0Vp-p (5msec. div)
IC7005-14 STOP 11.0Vp-p (5msec. div)
IC2503-17/18/19/20/21/22 PLAY 60mVp-p (50msec. div)
IC2503-25 PLAY 2.0Vp-p (0.5msec. div)
IC2503-1/2/30 PLAY 2.5mVp-p (50msec. div)
IC2501-1/2/17 PLAY 9.0Vp-p (2msec. div)
IC2501-8 PLAY 250mVp-p (2msec. div)
IC2501-9 PLAY 25 mVp-p (2msec. div)
IC2501-10 PLAY 0.9Vp-p (2msec. div)
IC2501-15 PLAY 5.0Vp-p (10msec. div)
IC2501-12/13/14 PLAY 1.4Vp-p (2msec. div)
8
9
10
11
12
13

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2005								IC2002			
MODE	1	2	3	4	5	6	7	8	1	2	3	4
STOP	3.6	1.3	1.4	0	3.2	1.3	4.9	5.0	1.1	0	0	0
PLAY	3.4	1.1	1.4	0	3.2	1.0	4.9	5.0	1.1	0	5.0	0
REC	3.2	1.3	1.4	0	3.2	1.3	4.9	5.0	1.1	0	0	0
F.F.	3.6.	1.0	1.4	0	3.2	1.2	4.9	5.0	1.1	0	2.1	0
REW	3.0	1.0	1.4	0	3.2	1.2	4.9	5.0	1.1	0	3.0	0

REF. NO.	IC2003			
MODE	1	2	3	4
STOP	2.2	1.1	0	0
PLAY	2.2	1.1	5.0	0
REC	2.2	1.1	0	0
F.F.	2.2	1.1	4.6	0
REW	2.2	1.1	2.5	0

REF. NO.	IC2004																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.0	0	2.4	2.4	5.0	5.0	0	2.6	0	0	4.9	5.0	2.4	0	0	0	0	2.4	5.0	0
PLAY	5.0	0	2.4	2.4	5.0	5.0	0	1.1	0	0	4.9	4.2	0	1.1	0	0	0	4.4	2.3	0
REC	5.0	0	2.4	2.4	5.0	5.0	0	2.6	0	0	4.9	5.0	0	5.0	0	0	0	4.4	5.0	0
F.F.	0	0	2.4	2.1	1.8	3.0	0	2.6	0	0	4.9	4.0	0	5.0	0	0	0	4.4	5.0	0
REW	0	0	2.4	2.1	3.4	3.0	0	2.6	0	0	4.9	5.0	4.9	5.0	0	0	0	4.4	5.0	0

REF. NO.	IC2004																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	0	5.0	5.0	0	5.0	0	0	5.0	0	0	0	0	5.0	2.3	2.2	5.0
PLAY	0	0	5.0	0	0	5.0	5.0	0	0.9	0	0	5.0	0	0	0	0	5.0	—	—	5.0
REC	0	5.0	0	0	0	5.0	5.0	0	5.0	0	5.0	5.0	0	0	0	0	5.0	—	—	5.0
F.F.	0	0	0	0	0	5.0	0	0	5.0	0	0	5.0	5.0	0	0	0	5.0	—	—	5.0
REW	0	0	0	0	0	5.0	0	0	5.0	5.0	0	5.0	5.0	0	0	0	5.0	—	—	5.0

REF. NO.	IC2004																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	2.1	1.2	3.2	5.0	5.0	0	5.0	0	0	0	4.8	5.0	0.1	4.9	0	4.9	0	0	4.9
PLAY	0	0	1.2	0	0	5.0	0	0	0	0	0	4.4	5.0	0.1	4.9	0	4.9	0	5.0	4.9
REC	0	1.9	1.2	4.5	0	5.0	0	0	0	0	0	5.0	5.0	0.1	4.9	0	4.9	0	5.0	4.9
F.F.	0	1.0	1.2	0	5.0	5.0	0	0	0	0	0	3.8	5.0	0	4.9	0	4.9	0	0	4.9
REW	0	1.0	1.2	0	5.0	5.0	0	0	0	0	0	4.2	5.0	0	4.9	0	4.9	0	0	4.9

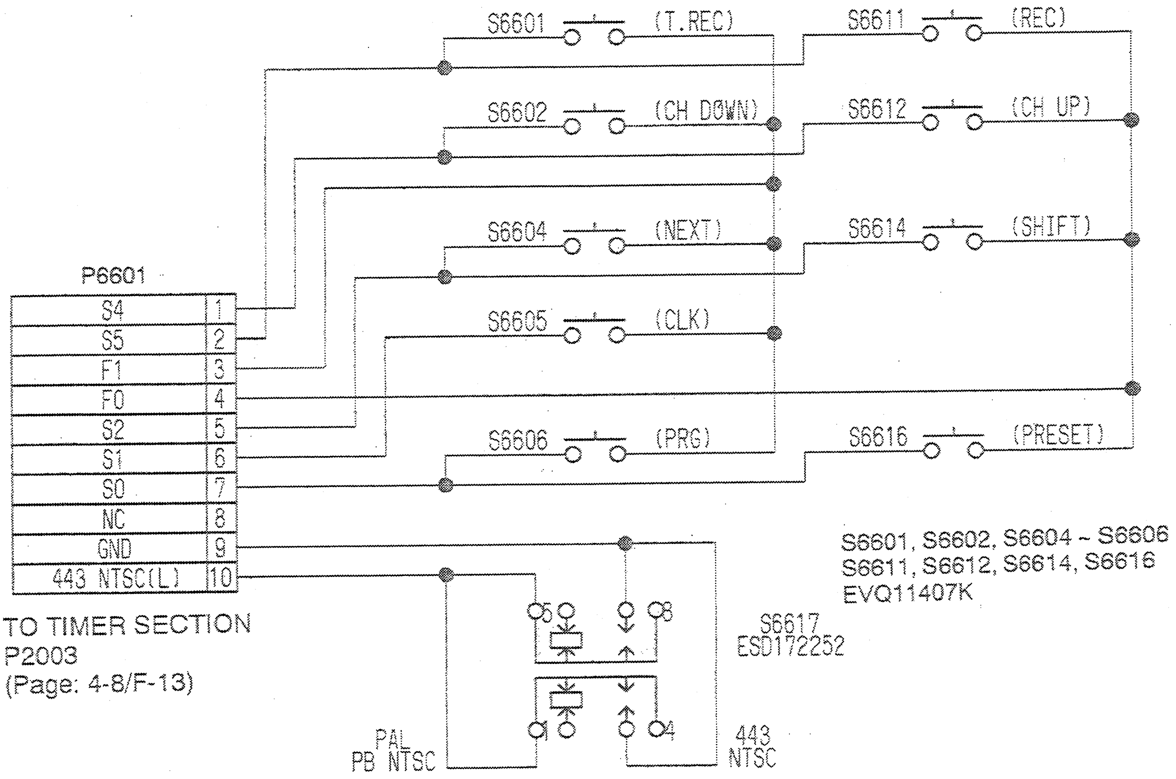
REF. NO.	IC2004																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	5.0	0	5.0	4.9	4.9	3.6	2.4	2.4	2.4	2.5	2.3	2.4	2.4	2.4	0	0	0	0	0.6
PLAY	5.0	5.0	0	0	4.9	4.9	3.6	2.4	2.4	2.4	2.5	2.5	2.4	2.4	2.4	0	0	0	0	0
REC	5.0	5.0	0	0	4.9	4.9	3.6	2.4	2.4	2.4	2.5	2.3	2.4	2.4	2.4	0	3.5	2.7	0	0
F.F.	0	5.0	0	5.0	4.9	4.9	3.6	2.4	2.4	2.4	1.2	3.7	2.4	2.4	2.4	0	0	0	0	0
REW	0	5.0	0	5.0	4.9	4.9	3.6	2.4	2.4	2.4	1.2	3.7	2.4	2.4	2.4	0	0	0	0	0

REF. NO.	IC2004																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	5.0	5.0	5.0	5.0	0	2.5	0.5	0	0	4.4	4.9	2.2	0.7	5.0	0	5.0	3.2	0.4	4.9	4.7
PLAY	5.0	5.0	5.0	5.0	0	2.3	5.0	0	0	4.1	4.9	2.4	0.3	5.0	0	5.0	3.2	0.7	4.9	4.7
REC	5.0	5.0	0	5.0	0	2.5	5.0	0	0	4.0	4.9	2.2	0.3	5.0	0	5.0	3.2	07	4.9	4.6
F.F.	5.0	5.0	5.0	5.0	0	2.5	5.0	0	0	4.4	4.9	2.1	0.7	5.0	0	5.0	3.2	1.8	4.9	4.3
REW	5.0	5.0	5.0	5.0	0	2.5	5.0	0	0	4.4	4.9	2.7	0.7	5.0	0	5.0	3.2	1.8	4.9	4.5

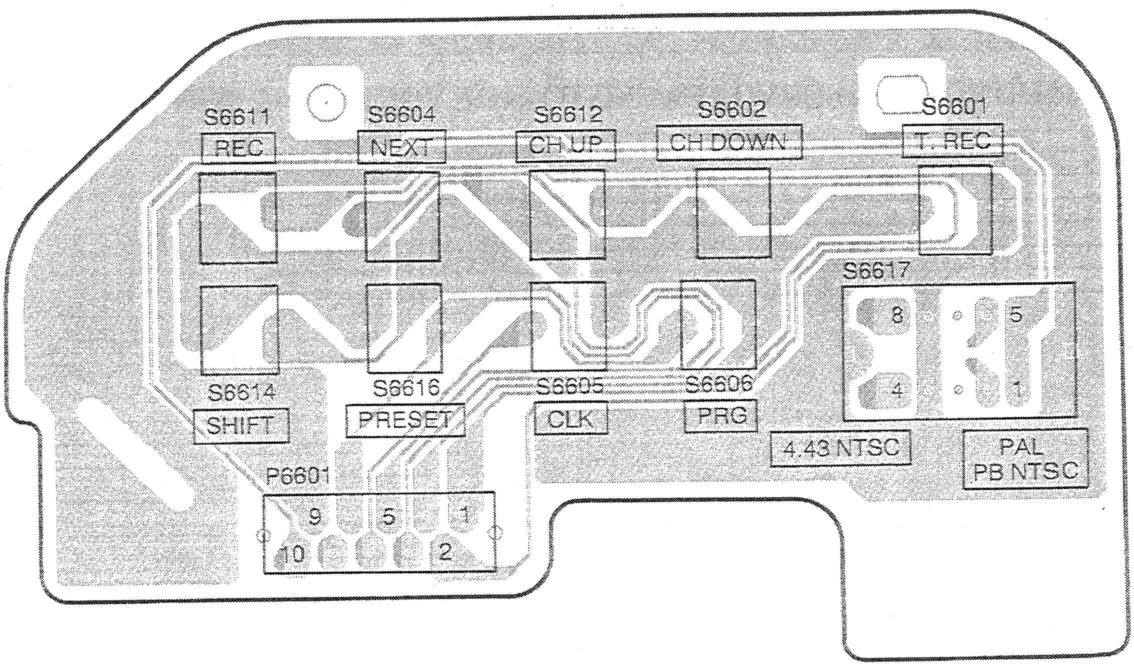
SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	QR2002			QR2003					QR2005			QR2006		
MODE	E	C	B	1	2	3	4	5	E	C	B	E	C	B
STOP	0	0	5.0	0	0	5.0	0	5.0	2.4	0	2.4	0	0	5.0
PLAY	0	0	5.0	0	0	5.0	0	5.0	2.4	5.0	4.4	0	0	5.0
REC	0	0	5.0	0	0	5.0	0	5.0	2.4	5.0	4.4	0	0	5.0
F.F.	0	1.2	0	13.3	7.2	0	0	0	2.4	5.0	4.4	0	0.4	0
REW	0	1.3	0	13.3	7.2	0	0	0	2.4	5.0	4.4	0	1.6	0

4-4. OPERATION SCHEMATIC DIAGRAM (NV-SD200AM ONLY)


S6601 (T.REC)
S6611 (REC)
S6602 (CH DOWN)
S6612 (CH UP)
S6604 (NEXT)
S6614 (SHIFT)
S6605 (CLK)
S6606 (PRG)
S6616 (PRESET)
P6601
S4 1
S5 2
F1 3
F0 4
S2 5
S1 6
S0 7
NC 8
GND 9
443 NTSC(L) 10
TO TIMER SECTION
P2003
(Page: 4-8/F-13)
S6601, S6602, S6604 ~ S6606
S6611, S6612, S6614, S6616
EVQ11407K
S6617
ESD172252
5
8
1
4
PAL
PB NTSC
443
NTSC

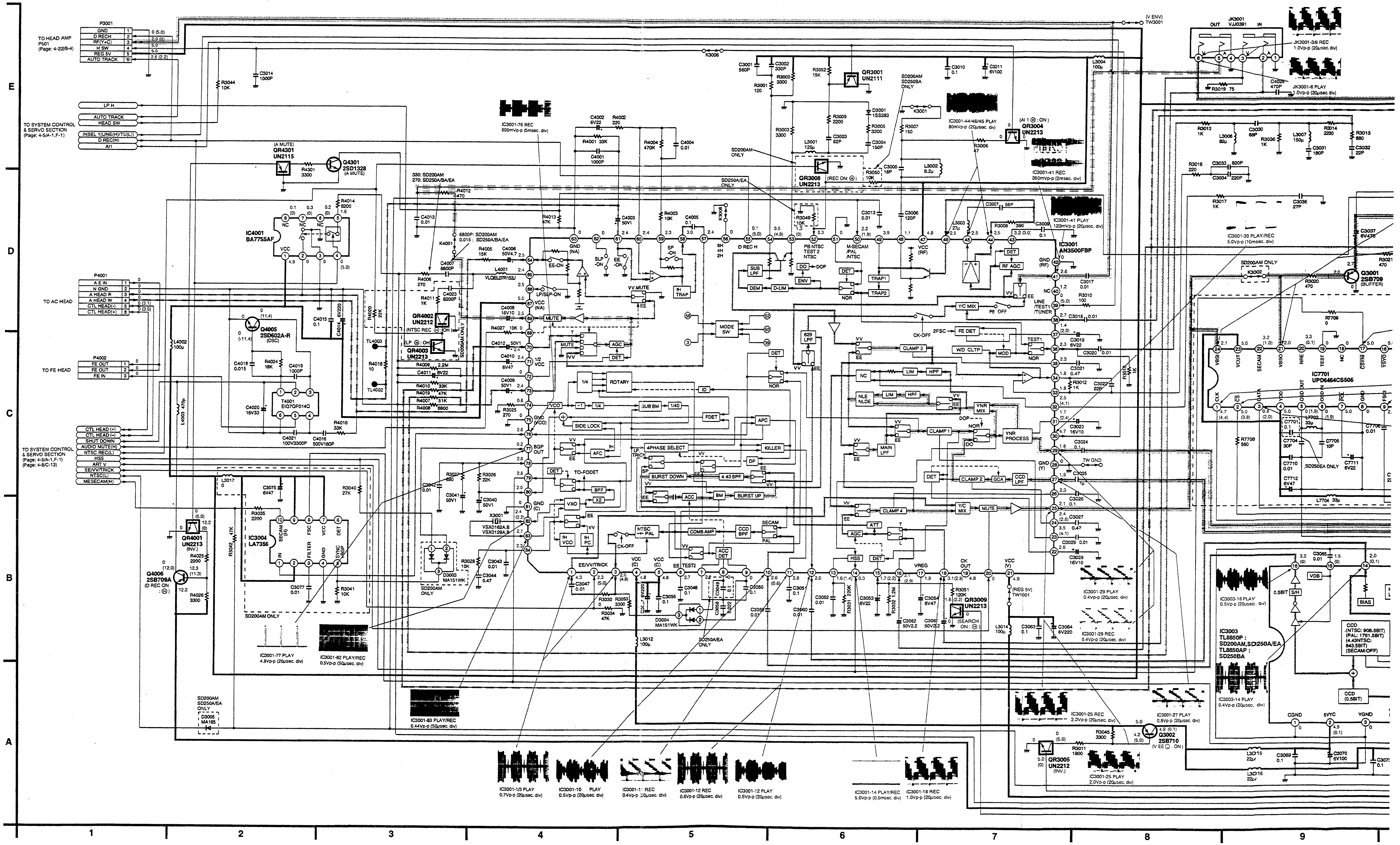
4-5. OPERATION C.B.A. (VEP07795A : NV-SD200AM ONLY)


S6611
REC
S6604
NEXT
S6612
CH UP
S6602
CH DOWN
S6601
T. REC
S6617
8
5
4
1
S6614
SHIFT
S6616
PRESET
S6605
CLK
S6606
PRG
4.43 NTSC
PAL
PB NTSC
P6601
9
5
1
10
2

4-6. VIDEO / AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

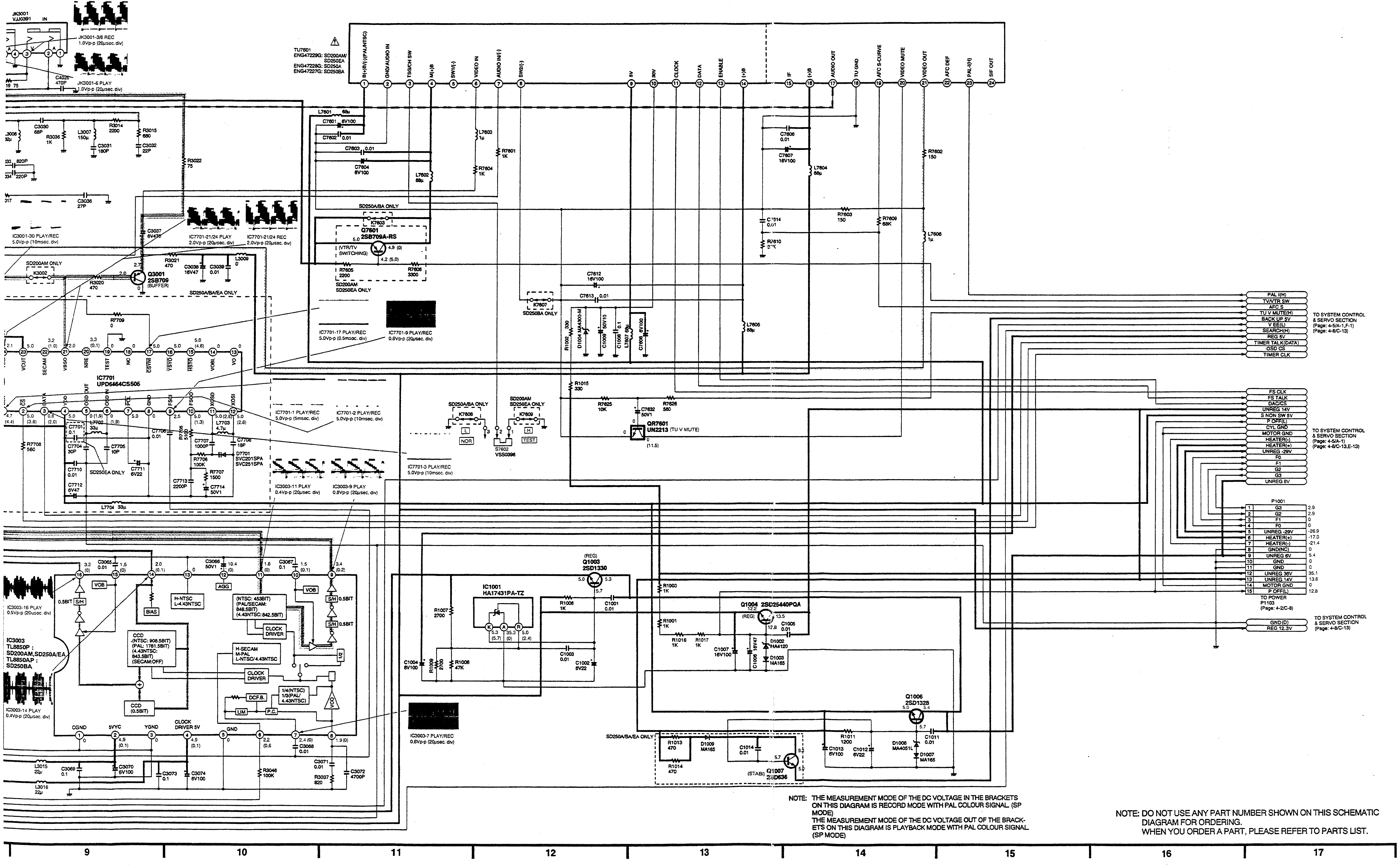
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE


P3001
GND
D RECH
RF(Y+C)
H SW
REG 5V
AUTO TRACK
TO HEAD AMP P501 (Page: 4-22/B-4)
LP H
AUTO TRACK
HEAD SW
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-5/A-1,F-1)
INSEL 1(LINE(H)/TU(L))
D REC(H)
AI1
(A MUTE) QR4301 UN2115
Q4301 2SD1328 (A MUTE)
IC4001 BA7755AF
P4001
A E IN
N GND
A HEAD R
A HEAD W
CTL HEAD(-)
CTL HEAD(+)
TO AC HEAD
Q4005 2SD602A-R (OSC)
T4001 EIQ7OF014Q
P4002
FE OUT
FE OUT
FE IN
TO FE HEAD
CTL HEAD (+)
CTL HEAD (-)
SHUT DOWN
AUDIO MUTE(H)
NTSC REC(L)
HSS
ART V
EE/VV/TRICK
NTSC(L)
MESECAM(H)
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-5/A-1,F-1) (Page: 4-8/C-13)
QR4001 UN2213 (INV.)
Q4006 2SB709A (D REC ON : H)
IC3004 LA7356
SD200AM ONLY
SD200AM SD250A/EA ONLY D3005 MA165
QR4002 UN2212
QR4003 UN2213
IC3001-76 REC 600mVp-p (5msec. div)
IC3001-77 PLAY 4.8Vp-p (20μsec. div)
IC3001-82 PLAY/REC 0.5Vp-p (50μsec. div)
IC3001-83 PLAY/REC 0.44Vp-p (50μsec. div)
QR3001 UN2111
QR3008 UN2213
QR3004 UN2213
IC3001-44/46/45 PLAY 80mVp-p (20μsec. div)
IC3001-41 REC 350mVp-p (2msec. div)
IC3001-41 PLAY 120mVp-p (20μsec. div)
IC3001 AN3500FBP
QR3009 UN2213
QR3005 UN2212 (INV.)
Q3002 2SB710
Q3001 2SB709 (BUFFER)
JK3001 VJJ0391
JK3001-3/6 REC 1.0Vp-p (20μsec. div)
JK3001-6 PLAY 1.0Vp-p (20μsec. div)
IC3001-30 PLAY/REC 5.0Vp-p (10msec. div)
IC7701 UPD6464CS505
IC3003 TL8850P : SD200AM,SD250A/EA TL8850AP : SD250BA
IC3003-16 PLAY 0.5Vp-p (20μsec. div)
IC3003-14 PLAY 0.4Vp-p (20μsec. div)
IC3001-29 PLAY 0.4Vp-p (20μsec. div)
IC3001-29 REC 0.4Vp-p (20μsec. div)
IC3001-25 REC 2.3Vp-p (20μsec. div)
IC3001-27 PLAY 0.8Vp-p (20μsec. div)
IC3001-25 PLAY 2.0Vp-p (20μsec. div)
IC3001-1/3 PLAY 0.7Vp-p (20μsec. div)
IC3001-10 PLAY 0.5Vp-p (20μsec. div)
IC3001-11 REC 0.4Vp-p (20μsec. div)
IC3001-12 REC 0.6Vp-p (20μsec. div)
IC3001-12 PLAY 0.5Vp-p (20μsec. div)
IC3001-14 PLAY/REC 5.0Vp-p (0.5msec. div)
IC3001-18 REC 1.0Vp-p (20μsec. div)
CCD (NTSC: 908.5BIT) (PAL: 1781.5BIT) (4.43NTSC: 843.5BIT) (SECAM:OFF)
A
B
C
D
E
1
2
3
4
5
6
7
8
9

PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

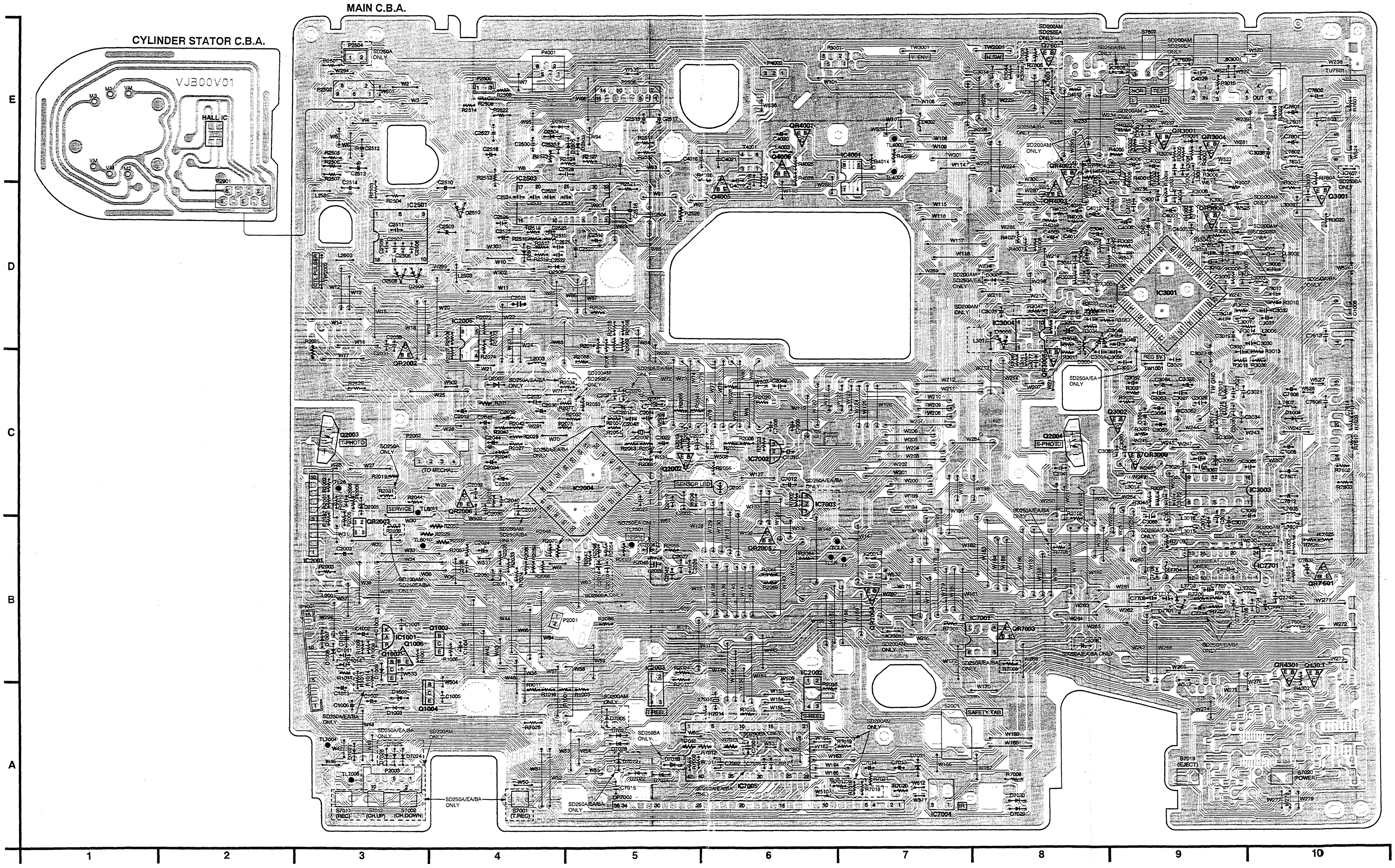
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

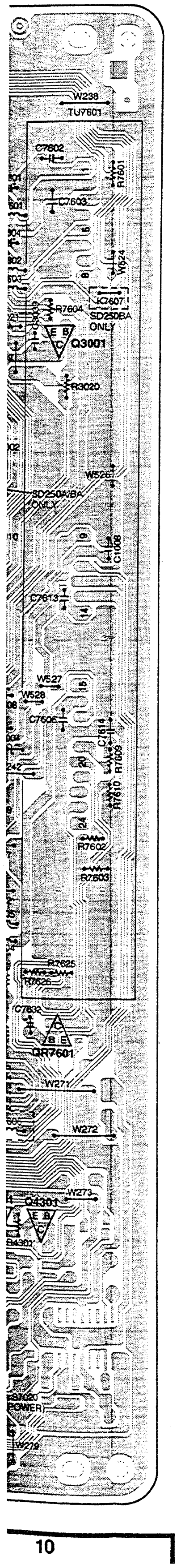

JK3001
VJJ0391
IN
JK3001-3/6 REC
1.0Vp-p (20μsec. div)
JK3001-6 PLAY
1.0Vp-p (20μsec. div)
TU7601
ENG47229G: SD200AM/SD250EA
ENG47228G: SD250A
ENG47227G: SD250BA
B(+)/B(-)(PAL/NTSC)
GND/AUDIO IN
TSC/CH SW
M(+)B
SW1(-)
VIDEO IN
AUDIO IN(-)
SW2(-)
5V
30V
CLOCK
DATA
ENABLE
(+)B
IF
(+)B
AUDIO OUT
TU GND
AFC S-CURVE
VIDEO MUTE
VIDEO OUT
AFC DEF
PAL I(H)
SIF OUT
SD250A/BA ONLY
K7603
Q7601
2SB709A-RS
(VTR/TV SWITCHING)
SD200AM SD250EA ONLY
Q3001
2SB709
(BUFFER)
SD200AM ONLY
K3002
SD250A/BA/EA ONLY
IC7701-21/24 PLAY
2.0Vp-p (20μsec. div)
IC7701-21/24 REC
2.0Vp-p (20μsec. div)
IC3001-30 PLAY/REC
5.0Vp-p (10msec. div)
IC7701-17 PLAY/REC
5.0Vp-p (0.5msec. div)
IC7701-9 PLAY/REC
0.5Vp-p (20μsec. div)
IC7701
UPD6464CS505
IC7701-1 PLAY/REC
5.0Vp-p (5msec. div)
IC7701-2 PLAY/REC
5.0Vp-p (10msec. div)
IC7701-3 PLAY/REC
5.0Vp-p (10msec. div)
D7701
SVC201SPA
SVC251SPA
SD250EA ONLY
K7607
SD250BA ONLY
SD250A/BA ONLY
K7606
SD200AM SD250EA ONLY
K7609
NOR
TEST
S7602
VSS0396
QR7601
UN2213 (TU V MUTE)
IC3003-11 PLAY
0.4Vp-p (20μsec. div)
IC3003-9 PLAY
0.8Vp-p (20μsec. div)
IC3003-16 PLAY
0.5Vp-p (20μsec. div)
IC3003-14 PLAY
0.4Vp-p (20μsec. div)
IC3003-7 PLAY/REC
0.6Vp-p (20μsec. div)
IC3003
TL8850P : SD200AM,SD250A/EA
TL8850AP : SD250BA
VOB
S/H
BIAS
H-NTSC
L-4.43NTSC
AGG
(NTSC: 453BIT)
(PAL/SECAM: 848.5BIT)
(4.43NTSC: 842.5BIT)
CLOCK DRIVER
CCD
(NTSC: 908.5BIT)
(PAL: 1781.5BIT)
(4.43NTSC: 843.5BIT)
(SECAM:OFF)
H-SECAM
M-PAL
L-NTSC/4.43NTSC
1/4(NTSC)
1/3(PAL/4.43NTSC)
DCF.B.
LIM
P.C.
CCD (0.5BIT)
CGND
5VYC
YGND
CLOCK DRIVER 5V
GND
(REG)
Q1003
2SD1330
IC1001
HA17431PA-TZ
Q1004 2SD25440PQA
D1002
MA4120
D1003
MA165
Q1006
2SD1328
SD250A/BA/EA ONLY
D1009
MA165
(STAB)
Q1007
2SD636
D1006
MA4051L
D1007
MA165
PAL I(H)
TV/VTR SW
AFC S
TU V MUTE(H)
BACK UP 5V
V EE(L)
SEARCH(H)
REG 5V
TIMER TALK(DATA)
OSD CS
TIMER CLK
TO SYSTEM CONTROL & SERVO SECTION
(Page: 4-5/A-1,F-1)
(Page: 4-8/C-13)
FS CLK
FS TALK
DAC/CS
UNREG 14V
S NON SW 5V
P OFF(L)
CYL GND
MOTOR GND
HEATER(-)
HEATER(+)
UNREG -29V
F0
F1
G2
G3
UNREG 6V
TO SYSTEM CONTROL & SERVO SECTION
(Page: 4-5/A-1)
(Page: 4-8/C-13,E-13)
P1001
1 G3 2.9
2 G2 2.9
3 F1 0
4 F0 0
5 UNREG -29V -26.9
6 HEATER(+) -17.0
7 HEATER(-) -21.4
8 GND(NC) 0
9 UNREG 6V 5.4
10 GND 0
11 GND 0
12 UNREG 36V 35.1
13 UNREG 14V 13.6
14 MOTOR GND 0
15 P OFF(L) 12.8
TO POWER
P1103
(Page: 4-2/C-8)
GND(D)
REG 12.3V
TO SYSTEM CONTROL & SERVO SECTION
(Page: 4-8/C-13)
9
10
11
12
13
14
15
16
17

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-7. MAIN C.B.A. (VEP06996A : NV-SD200AM) (VEP06996B : NV-SD250A) (VEP06996C : NV-SD250EA) (VEP06996D : NV-SD250BA)


MAIN C.B.A.
CYLINDER STATOR C.B.A.
VJB00V01
HALL IC
IC2501
IC2503
IC2005
IC2004
IC4001
IC3001
IC3004
IC3003
IC7001
IC7002
IC7003
IC7004
IC7005
IC7701
IC1001
IC2001
IC2002
IC2003
QR2002
QR2003
QR2005
QR2006
QR4001
QR4002
QR4003
QR3001
QR3004
QR3006
QR3009
QR7003
QR7601
QR4301
Q4301
Q2003
T-PHOTO
Q2004
S-PHOTO
SENSOR LED
SERVICE
(TO MECHA)
T-REEL
S-REEL
SAFETY TAB
S7001 (REC)
S7012 (CH.UP)
S7002 (CH.DOWN)
S7011 (T.REC)
S7019 (EJECT)
S7020 (POWER)
SD250A/EA/BA ONLY
SD250A/EA ONLY
SD200AM ONLY
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10


W238
TU7601
C7602
R7601
C7603
W524
R7604
IC7607
SD250BA ONLY
Q3001
R3020
SD250A/BA ONLY
W526
C7613
W527
W528
C7606
R7609
R7610
R7602
R7603
R7625
R7626
C7632
QR7601
W271
W272
W273
Q4301
R4301
S3020 POWER
W279
10

MAIN C.B.A.

Transistor	
Q1003	B-4
Q1004	A-3
Q1007	B-3
Q2002	C-5
Q2003	C-3
Q2004	C-8
Q3001	D-10
Q3002	C-9
Q4005	D-6
Q4006	E-6
Q4301	B-10

Transistor & Resistor	
QR2002	C-3
QR2003	B-3
QR2004	B-7
QR2005	B-6
QR2006	C-4
QR3004	E-9
QR3005	C-8
QR3008	D-9
QR3009	C-9
QR4001	E-6
QR4002	E-8
QR4003	D-8
QR4301	B-10
QR7003	B-8
QR7601	B-10

Integrated Circuit	
IC1001	B-3
IC2001	B-3
IC2002	B-6
IC2003	B-5
IC2004	C-5
IC2005	D-4
IC2501	D-3
IC2503	D-4
IC3001	D-9
IC3003	C-10
IC3004	D-8
IC4001	E-7
IC7001	B-8
IC7002	C-6
IC7003	C-6
IC7004	A-7
IC7005	A-6
IC7701	B-10

Test Land	
TL26	C-3
TL4002	E-7
TL4003	E-7
TL6010	B-3
TL6011	C-3
TL7004	A-3
TL7005	A-3
TL7501	B-5

Test Wire	
TW1001	C-9
TW2001	E-8
TW2002	D-3
TW3001	E-7
TW GND	C-9

Connector	
P1001	B-3
P2001	B-4
P2003	A-3
P2502	E-3
P2504	E-3
P2505	E-4
P2506	E-5
P3001	E-6
P4001	E-4
P4002	E-6

ADDRESS INFORMATION

4-8. VIF PACK C.B.A. (VEP07801N : NV-SD200AM, SD250A/ EA)
(VEP07801P : NV-SD250BA)

VIF PACK C.B.A.

Transistor	
Q0701	B-1

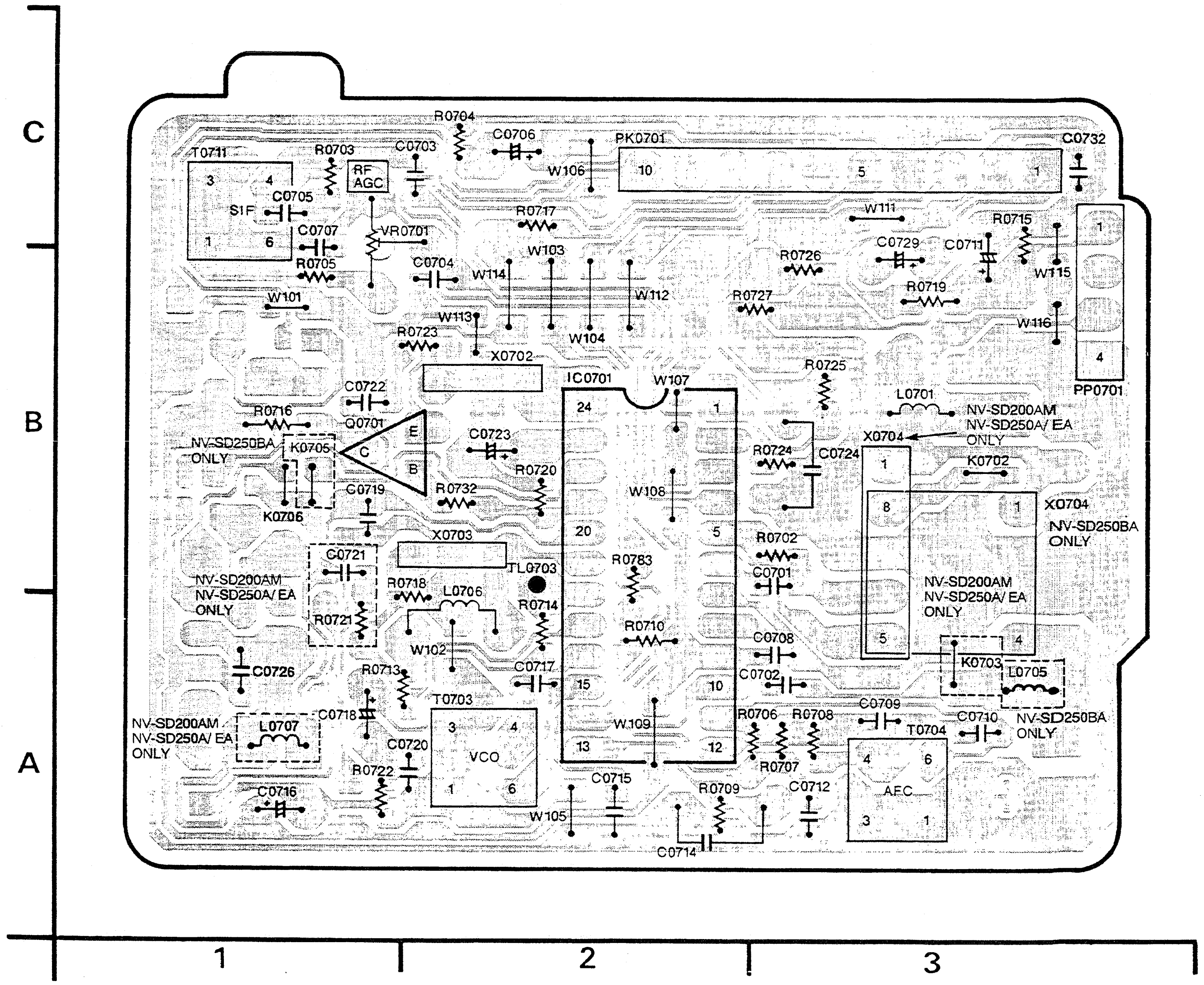
Adjustment	
VR0701	C-1

Integrated Circuit	
IC0701	B-2

Connector	
PK0701	C-3
PP0701	B-3

Test Land	
TL0703	B-2

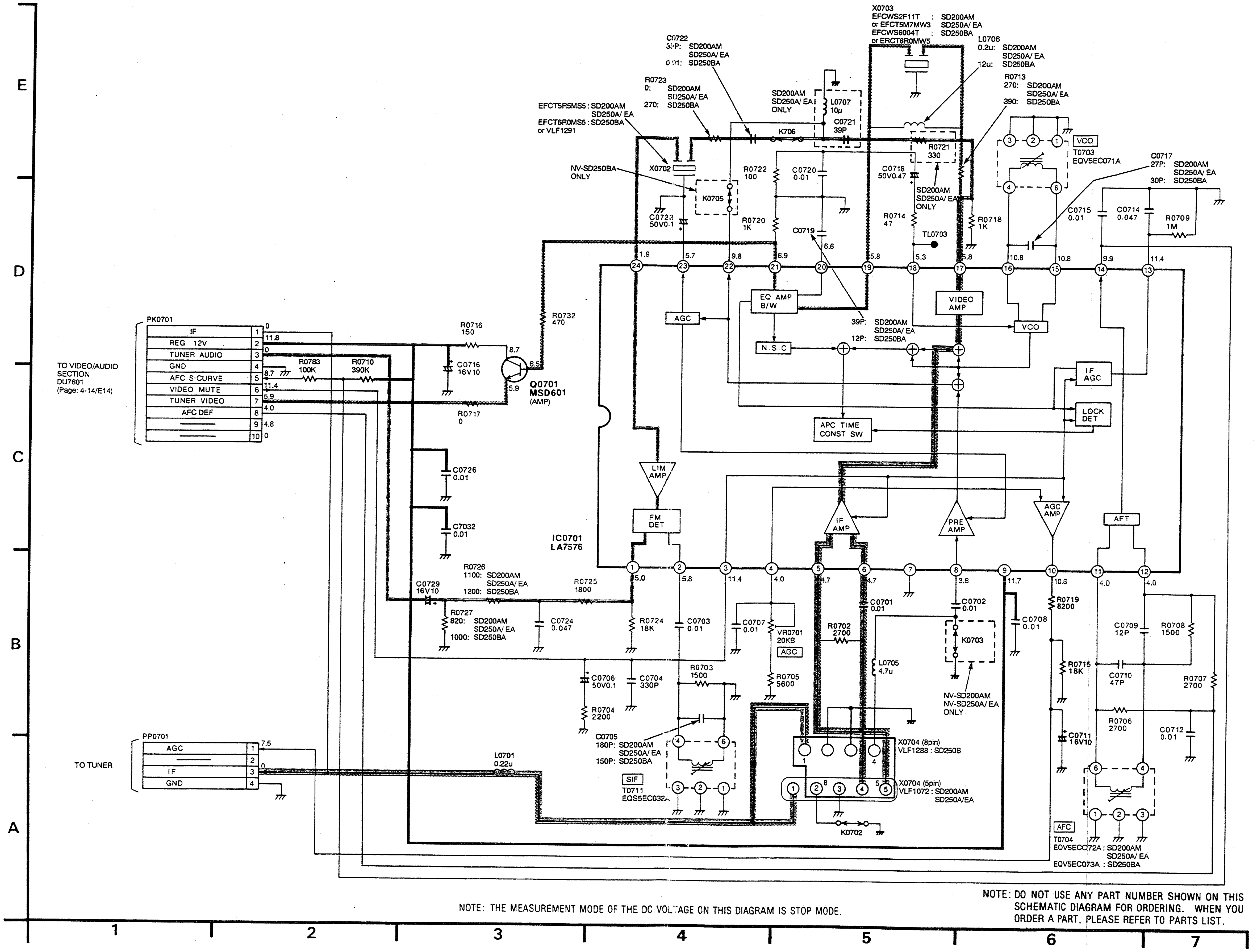
ADDRESS INFORMATION


C
B
A
1
2
3
T0711
SIF
R0703
RF AGC
C0703
R0704
C0706
W106
PK0701
C0732
C0705
C0707
VR0701
R0717
R0705
C0704
W114
W103
W111
R0715
C0729
C0711
W115
R0726
R0719
W101
W112
R0727
W116
W113
R0723
W104
X0702
PP0701
IC0701
W107
R0725
C0722
Q0701
R0716
L0701
NV-SD200AM NV-SD250A/ EA ONLY
NV-SD250BA ONLY
K0705
C0723
R0720
R0724
C0724
X0704
K0702
C0719
R0732
K0706
W108
X0704 NV-SD250BA ONLY
X0703
R0702
C0721
R0783
C0701
TL0703
NV-SD200AM NV-SD250A/ EA ONLY
R0718
L0706
R0714
R0721
R0710
C0708
W102
C0702
K0703
L0705
C0726
R0713
C0717
T0703
C0709
C0718
W109
R0706
R0708
C0710
NV-SD250BA ONLY
T0704
L0707
VCO
C0720
R0707
R0722
C0715
R0709
C0712
AFC
C0716
W105
C0714

4-9. VIF PACK SCHEMATIC DIAGRAM

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

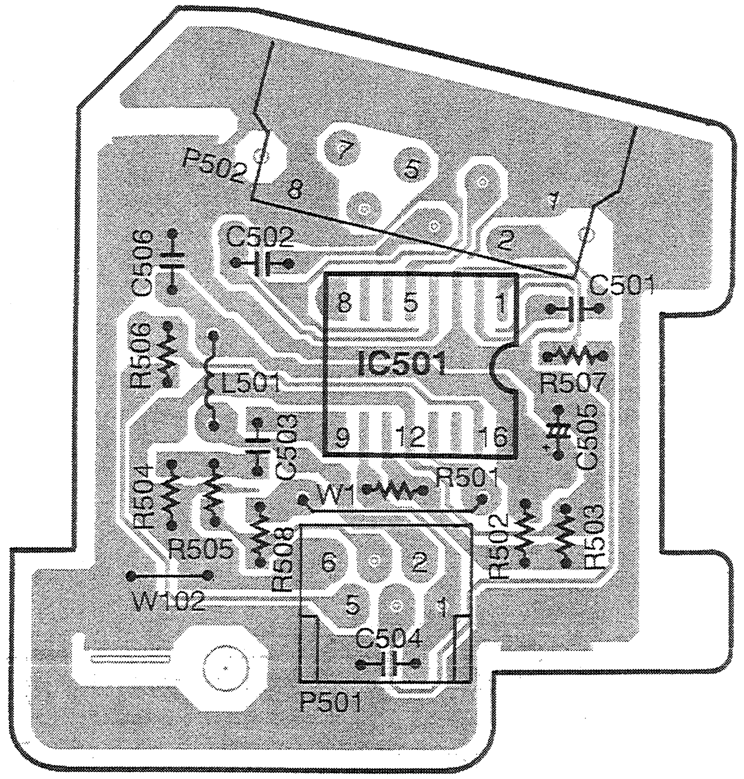

E
D
C
B
A
1
2
3
4
5
6
7
PK0701
IF
REG 12V
TUNER AUDIO
GND
AFC S-CURVE
VIDEO MUTE
TUNER VIDEO
AFC DEF
TO VIDEO/AUDIO SECTION DU7601 (Page: 4-14/E14)
PP0701
AGC
IF
GND
TO TUNER
R0783 100K
R0710 390K
R0716 150
C0716 16V10
R0717 0
Q0701 MSD601 (AMP)
R0732 470
C0726 0.01
C7032 0.01
C0729 16V10
R0726 1100: SD200AM SD250A/ EA 1200: SD250BA
R0727 820: SD200AM SD250A/ EA 1000: SD250BA
C0724 0.047
R0725 1800
L0701 0.22u
IC0701 LA7576
LIM AMP
FM DET.
AGC
EQ AMP B/W
N.S.C
APC TIME CONST SW
IF AMP
PRE AMP
VIDEO AMP
VCO
IF AGC
LOCK DET
AGC AMP
AFT
EFCT5R5MS5 : SD200AM SD250A/ EA
EFCT6R0MS5 : SD250BA or VLF1291
NV-SD250BA ONLY
X0702
K0705
C0723 50V0.1
C0722 33P: SD200AM SD250A/ EA 0.01: SD250BA
R0723 0: SD200AM SD250A/ EA 270: SD250BA
R0722 100
R0720 1K
C0720 0.01
C0719
K706
SD200AM SD250A/ EA ONLY
L0707 10µ
C0721 39P
X0703 EFCWS2F11T : SD200AM or EFCT5M7MW3 SD250A/ EA EFCWS6004T : SD250BA or ERCT6R0MW5
L0706 0.2u: SD200AM SD250A/ EA 12u: SD250BA
R0713 270: SD200AM SD250A/ EA 390: SD250BA
R0721 330
C0718 50V0.47
R0714 47
SD200AM SD250A/ EA ONLY
TL0703
R0718 1K
VCO
T0703 EQV5EC071A
C0715 0.01
C0714 0.047
C0717 27P: SD200AM SD250A/ EA 30P: SD250BA
R0709 1M
39P: SD200AM SD250A/ EA 12P: SD250BA
C0706 50V0.1
R0704 2200
C0704 330P
R0724 18K
C0703 0.01
R0703 1500
C0705 180P: SD200AM SD250A/ EA 150P: SD250BA
SIF
T0711 EQS5EC032A
C0707 0.01
VR0701 20KB
AGC
R0705 5600
R0702 2700
C0701 0.01
L0705 4.7u
X0704 (8pin) VLF1288 : SD250B
X0704 (5pin) VLF1072 : SD200AM SD250A/EA
K0702
C0702 0.01
K0703
NV-SD200AM NV-SD250A/ EA ONLY
C0708 0.01
R0719 8200
R0715 18K
C0710 47P
C0711 16V10
C0709 12P
R0708 1500
R0707 2700
R0706 2700
C0712 0.01
AFC
T0704 EQV5EC072A : SD200AM SD250A/ EA EQV5EC073A : SD250BA

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

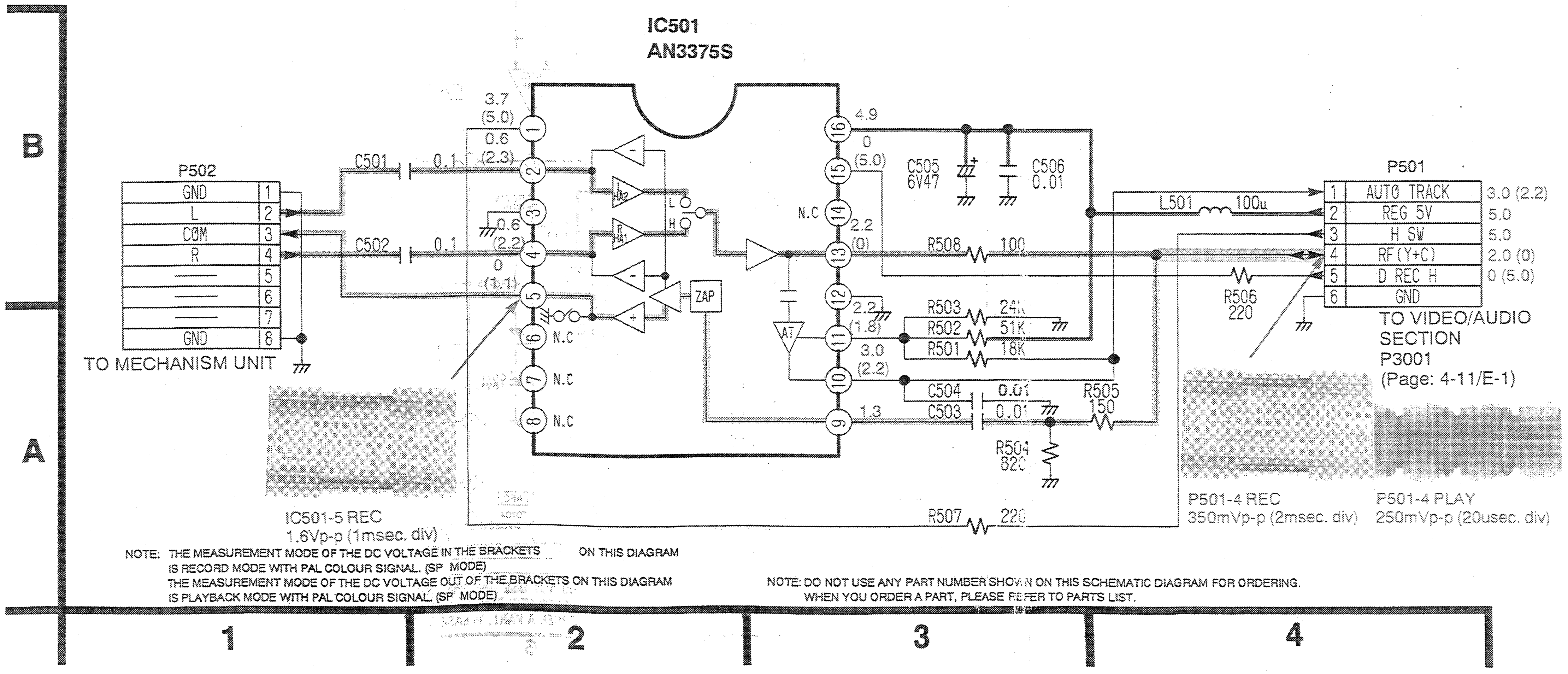
4-10.HEAD AMP SCHEMATIC DIAGRAM

4-11.HEAD AMP C.B.A. (VEP05217A)


P502
7
5
8
1
2
C506
C502
C501
8
5
1
IC501
R506
L501
R507
9
12
16
C503
C505
R504
W1
R501
R505
R508
6
2
R502
R503
W102
5
1
C504
P501

▬ VIDEO MAIN SIGNAL PATH IN REC MODE

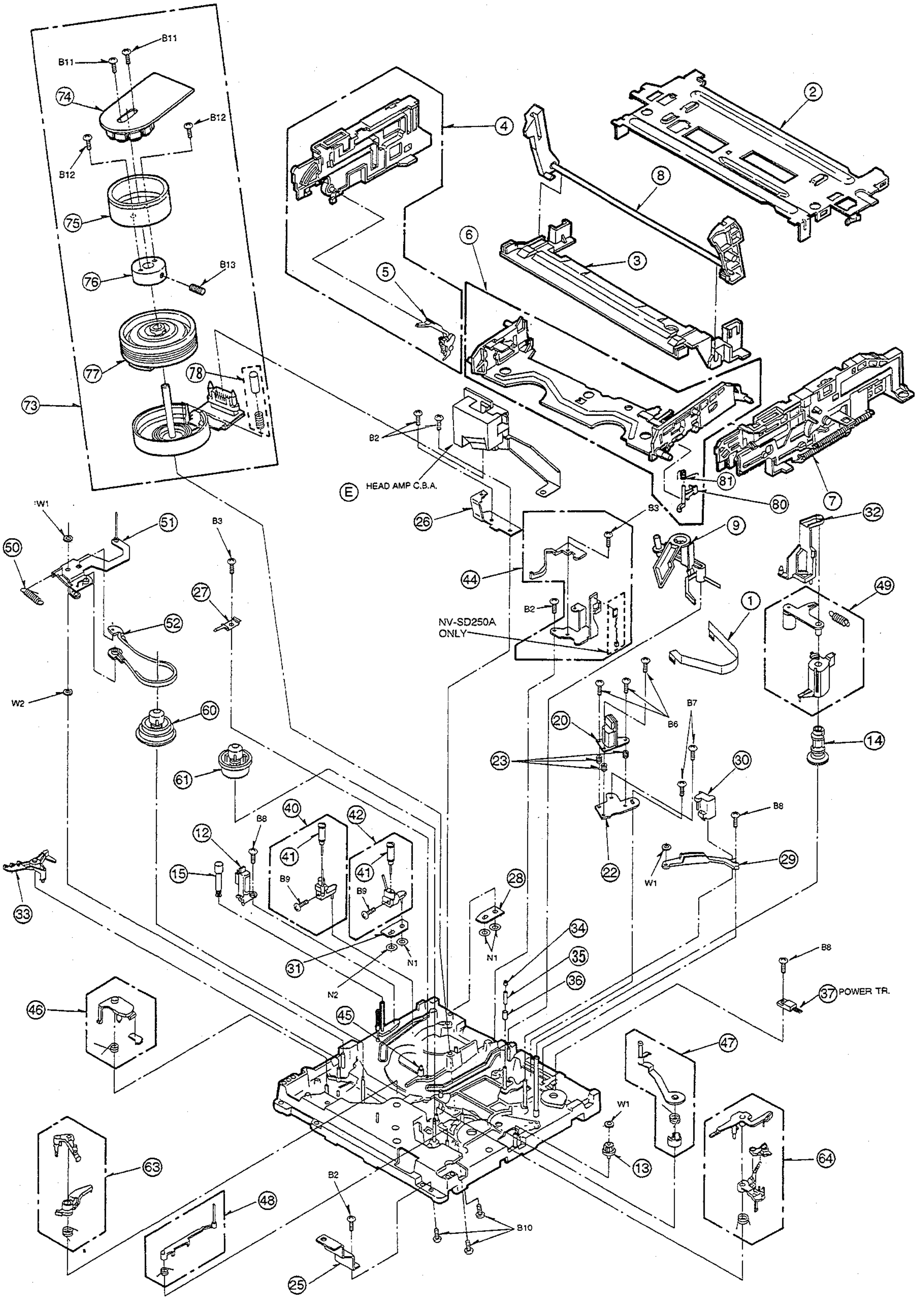
▬ VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE


IC501
AN3375S
B
A
P502
GND 1
L 2
COM 3
R 4
5
6
7
GND 8
TO MECHANISM UNIT
C501 0.1
C502 0.1
3.7
(5.0)
0.6
(2.3)
0.6
(2.2)
0
(1.1)
1
2
3
4
5
6 N.C
7 N.C
8 N.C
L HA2
R HA1
L
H
ZAP
AT
16 4.9
15 0 (5.0)
14 N.C 2.2
13 (0)
12 2.2
11 (1.8)
10 3.0 (2.2)
9 1.3
C505 6V47
C506 0.01
L501 100u
R508 100
R503 24K
R502 51K
R501 18K
C504 0.01
C503 0.01
R505 150
R504 820
R506 220
R507 220
P501
1 AUTO TRACK 3.0 (2.2)
2 REG 5V 5.0
3 H SW 5.0
4 RF(Y+C) 2.0 (0)
5 D REC H 0 (5.0)
6 GND
TO VIDEO/AUDIO SECTION P3001 (Page: 4-11/E-1)
IC501-5 REC
1.6Vp-p (1msec. div)
P501-4 REC
350mVp-p (2msec. div)
P501-4 PLAY
250mVp-p (20usec. div)
1
2
3
4

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SECTION 5
EXPLODED VIEWS & PARTS LIST
5-1. EXPLODED VIEW MECHANICAL REPLACEMENT PARTS LIST
1. CHASSIS PARTS SECTION (1)


B11
B11
74
B12
B12
75
76
B13
77
78
73
4
5
6
8
2
3
7
B2
B2
E
HEAD AMP C.B.A.
26
81
80
B3
9
32
W1
51
50
B3
27
52
44
B2
NV-SD250A ONLY
1
49
W2
60
B6
B7
20
23
30
14
61
40
42
B8
12
41
41
15
B9
B9
B8
22
29
W1
33
28
31
N1
N1
N2
34
35
36
B8
37
POWER TR.
46
45
47
W1
13
64
63
48
B2
B10
25

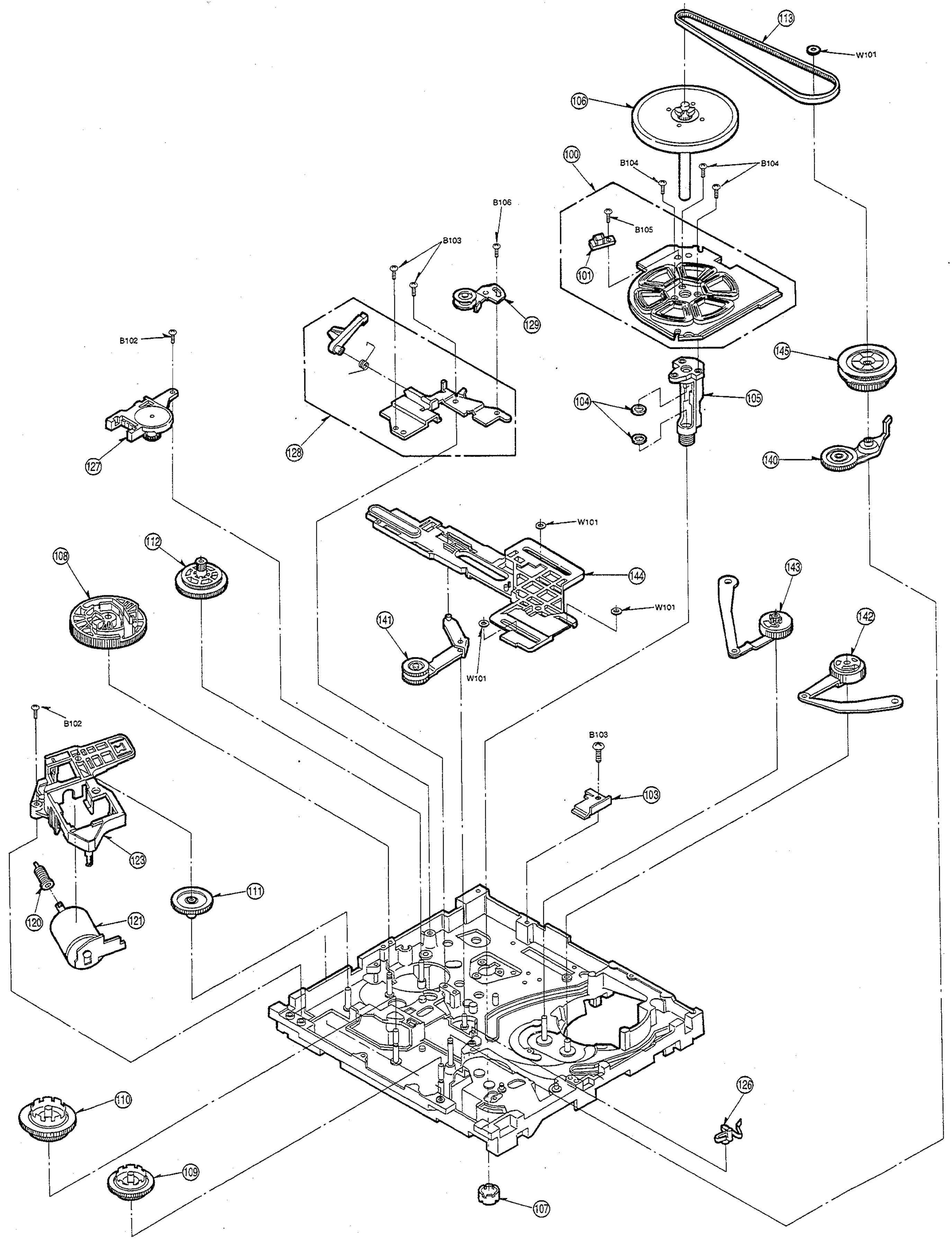
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0758	FLEXIBLE CABLE (6P)	1	P4001-P1502
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VML2902	OPENER LEVER UNIT	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VML2908	CLEANER ARM	1	
12(1)		VBS0052	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0217	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA9158	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
37(1)		2SB1370YD01E	POWER TRANSISTOR	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	
44(1)		VXA5170	HEAD AMP MOUNT ANGLE (R) U.	1	NV-SD200AM
					NV-SD250A
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	NV-SD250EA/BA
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2394	TAKE UP TENSION REGULATOR	1	
			ARM UNIT		
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXZ0310	TENSION BAND UNIT	1	
60(1)		VXR0236	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0237	TAKE UP REEL TABLE UNIT	1	
63(1)		VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXZ0313	TAKE UP BRAKE ARM UNIT	1	
73(1)		VEG1216	CYLINDER UNIT	1	
74(1)		VEK7236	STATOR UNIT	1	<!>
75(1)		VXP1500	ROTOR UNIT	1	
76(1)		VDB1256	CYLINDER RETAINER	1	
77(1)		VEH0712	UPPER CYLINDER UNIT	1	
78(1)		VXS0135	EARTH BRUSH UNIT	1	
80(1)		VML2680	RELEASE LEVER	1	
81(1)		VMB2013	RELEASE SPRING	1	
B2(1)		XTV26+6F	SCREW	4	
B3(1)		XTV26+4F	SCREW	2	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	3	
B9(1)		XQN2+AJ4	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		VHD0844	SCREW	2	
B12(1)		VHD0843	SCREW	2	
B13(1)		XXE3W4FP	SCREW	1	
N1(1)		VHN0192	NUT	3	
N2(1)		VHN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV26D5G	WASHER	1	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8930	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1519	ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0956	SUPPLY REEL GEAR	1	
110(2)		VDG0957	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VXA5138	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2378	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
B102(2)		XTV26+8F	SCREW	2	
B103(2)		XTV26+6F	SCREW	3	
B104(2)		VHD0753	SCREW	3	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26+4FZ	SCREW	1	
W101(2)		VMX2208	WASHER	4	

2. CHASSIS PARTS SECTION (2)


⑬
W101
⑩⑥
⑩⓪
B104
B104
B105
⑩①
B106
B103
⑫⑨
⑭⑤
⑩⑤
⑩④
⑭⓪
B102
⑫⑦
⑫⑧
W101
⑭④
⑪②
⑩⑧
W101
⑭①
W101
⑭③
⑭②
B102
B103
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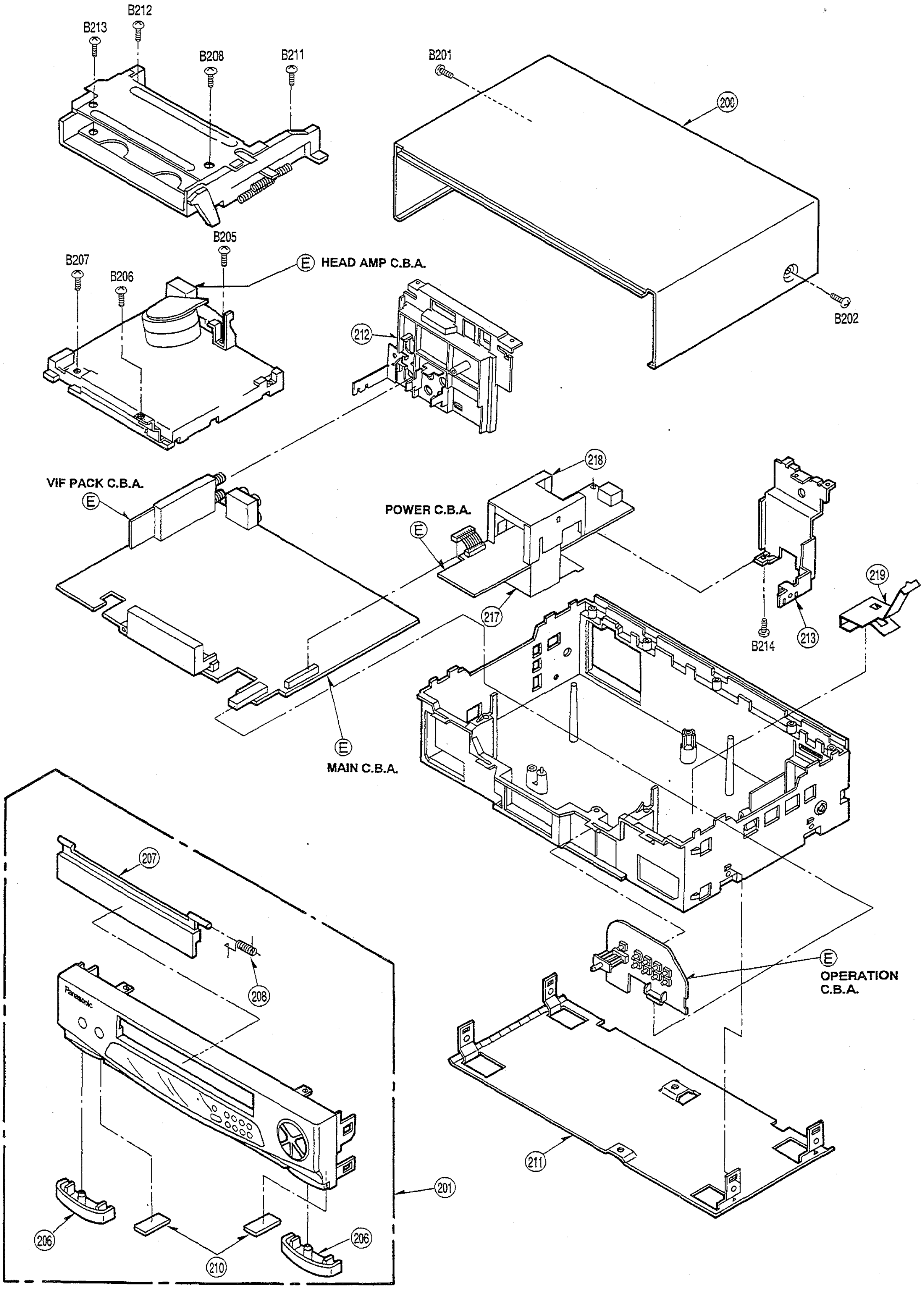
3. CASING PARTS SECTION


B213
B212
B208
B211
B201
200
B202
B205
B207
B206
E HEAD AMP C.B.A.
212
VIF PACK C.B.A.
E
218
POWER C.B.A.
E
219
217
B214
213
E
MAIN C.B.A.
207
208
E
OPERATION C.B.A.
Panasonic
211
201
206
210
206

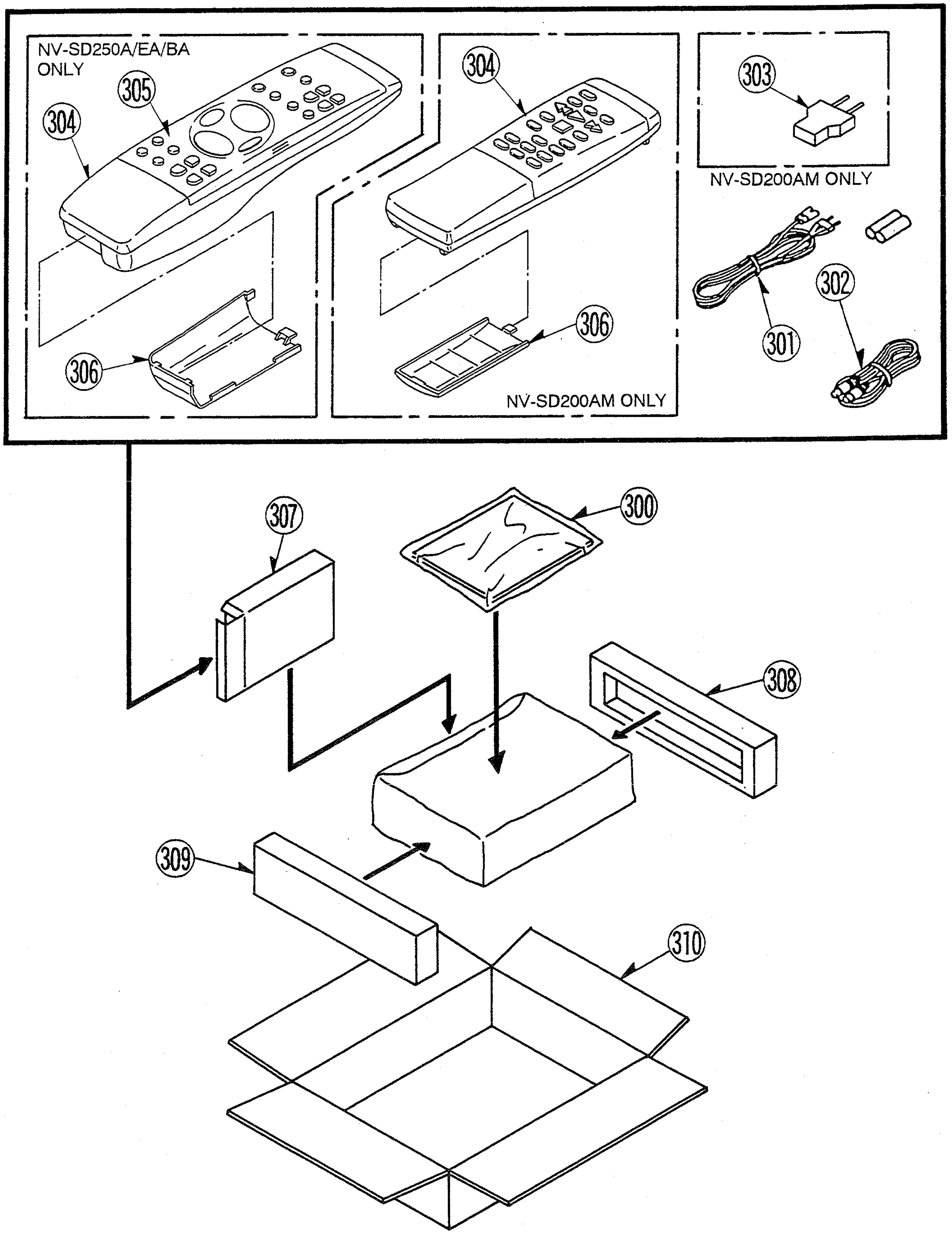
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VGM1272	TOP PANEL	1	
201(3)		VYP5922	FRONT PANEL UNIT	1	NV-SD200AM
201(3)		VYP5924	FRONT PANEL UNIT	1	NV-SD250A/EA
201(3)		VYP6047	FRONT PANEL UNIT	1	NV-SD250BA
206(3)		VKA0192	LEG	1	
207(3)		VKF2260	BLINDER PANEL	1	
208(3)		VMB2521	BLINDER SPRING	1	
209(3)		VKW2010	TIMER WINDOW	1	NV-SD200AM
210(3)		VKA0122	FOOT	2	
211(3)		VKU0409	BOTTOM PLATE	1	
212(3)		VXA5536	JACK BOARD	1	NV-SD200AM
					NV-SD250EA
212(3)		VXA5538	ANT JACK BOARD	1	NV-SD250A/BA
213(3)		VMP4593	POWER PLATE	1	
217(3)		VMZ2378	BARRIER	1	<!>
218(3)		VSC4205	POWER *SHIELD* COVER	1	
B201-B202		VHD0378	SCREW	2	
B205-B207		VHD0168	SCREW	3	
B208		XTV26+10F	SCREW	1	
B211-B213		XTV26+8FR	SCREW	3	
B214		VHD0418	SCREW	1	

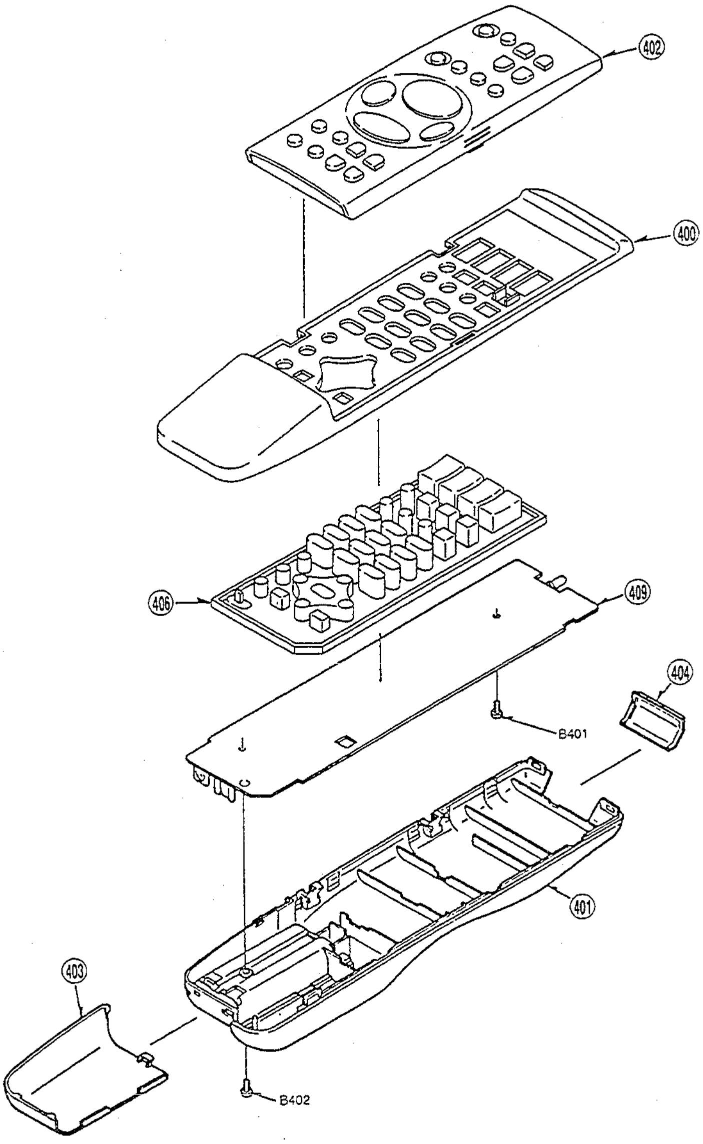
Note:1.* Be sure to make your orders of replacement parts according to this list.—
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT6147	OPERATING INSTRUCTIONS	1	<!>NV-SD200AM
			(ENGLISH, ARABIC)		
300(4)		VQT6148	OPERATING INSTRUCTIONS	1	<!>NV-SD250A/EA
			(ENGLISH)		
300(4)		VQT6276	OPERATING INSTRUCTIONS	1	<!>NV-SD250BA
			(ENGLISH, AFRIKAANS)		
301(4)		VJA0713	AC CORD	1	<!>NV-SD200AM
301(4)		VJA0754	AC CORD	1	<!>NV-SD250A/EA
301(4)		VJA0809	AC CORD	1	<!>NV-SD250BA
302(4)		VJA0376	DIN RF CABLE	1	
303(4)		VJP2974	AC PLUG ADAPTOR	1	<!>NV-SD200AM
304(4)		EUR571110	REMOTE CONTROLLER	1	NV-SD200AM
304(4)		VEQ1637	REMOTE CONTROLLER	1	NV-SD250A/EA
304(4)		VEQ1646	REMOTE CONTROLLER	1	NV-SD250BA
305(4)		VYK6388	DOOR PANEL	1	NV-SD250A/EA/BA
306(4)		UR57EC490	BATTERY COVER	1	NV-SD200AM
306(4)		VKF2115	BATTERY COVER	1	NV-SD250A/EA/BA
307(4)		VPK1726	ACCESSORY BOX	1	
308(4)		VPN4139	CUSHION (R)	1	
309(4)		VPN4140	CUSHION (L)	1	
310(4)		VPG8006	PACKING CASE	1	NV-SD200AM
310(4)		VPG8008	PACKING CASE	1	NV-SD250A
310(4)		VPG8009	PACKING CASE	1	NV-SD250EA
310(4)		VPG8176	PACKING CASE	1	NV-SD250BA

4. PACKING PARTS SECTION


NV-SD250A/EA/BA ONLY
305
304
306
304
306
NV-SD200AM ONLY
303
NV-SD200AM ONLY
302
301
307
300
308
309
310

5. REMOTE CONTROLLER UNIT



Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
400(5)		VYK6285	TOP COVER UNIT	1	NV-SD250BA
400(5)		VYK6262	TOP COVER UNIT	1	NV-SD250A/EA
401(5)		VYK5446	BOTTOM COVER UNIT	1	NV-SD250A/EA/BA
402(5)		VYK6388	DOOR PANEL UNIT	1	NV-SD250A/EA/BA
403(5)		VKF2115	BATTERY COVER UNIT	1	NV-SD250A/EA/BA
404(5)		VKW1802	IR WINDOW	1	NV-SD250A/EA/BA
406(5)		VSP0842	RUBBER CONTACT	1	NV-SD250A/EA/BA
409(5)		----------	REMOTE CONTROLLER C.B.A.	1	NV-SD250A/EA/BA
B401(5)		XTB2+6G	SCREW	1	NV-SD250A/EA/BA
B402(5)		XTB2+8GFZ	SCREW	1	NV-SD250A/EA/BA

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			SERVISE FIXTURES & TOLLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0680	WHITE GREASE	1	
		VFK0851	STATOR CENTERING TOOL	1	
		VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	

5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4.The P.C.Board units marked width'■'show below the main assembled parts.
5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP06996A	MAIN C.B.A.	1	(RTL)NV-SD200AM
			(Page:5-8)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801N).
		VEP07801N	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06996A).
		VEP06996B	MAIN C.B.A.	1	(RTL)NV-SD250A
			(Page:5-12)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801N).
		VEP07801N	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06996B).
		VEP06996C	MAIN C.B.A.	1	(RTL)NV-SD250EA
			(Page:5-16)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801N).
		VEP07801N	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06996C).
		VEP06996D	MAIN C.B.A.	1	(RTL)NV-SD250BA
			(Page:5-20)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801P).
		VEP07801P	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06996D).
		VEP05217A	HEAD AMP C.B.A.	1	(RTL)
			(Page:5-23)		
		VEP07795A	SWITCH C.B.A.	1	(RTL)NV-SD200AM
			(Page:5-24)		
		VEP01621C	POWER C.B.A.	1	(RTL)<!>NV-SD200AM
			(Page:5-24)		
		VEP01621D	POWER C.B.A.	1	(RTL)<!>
			(Page:5-24)		NV-SD250A/EA/BA
		----------	CYLINDER STATOR C.B.A.	1	(RTL) C.B.A. IS
			(Page:5-25)		INCLUDED IN CYLINDER
					STATOR UNIT(VEK7236).
		----------	RT CONNECTION C.B.A.	1	C.B.A. IS INCLUDED
			(Page:5-25)		IN CYLINDER UNIT.
		----------	MOTOR C.B.A.	1	C.B.A. IS INCLUDED
			(Page:5-25)		IN LOADING MOTOR (1)
					UNIT(VEM0427).
		ENG47229G	TUNER	1	<!>NV-SD200AM
					NV-SD250EA
		ENG47228G	TUNER	1	<!>NV-SD250A
		ENG47227G	TUNER	1	<!>NV-SD250BA
F1101		XBA2C16TBO	FUSE	1	<!>
	■	VEP06996A	MAIN C.B.A.		(RTL)NV-SD200AM
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0721,22		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	2	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2013		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3075		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3077		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4023		ECUM1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D2001		LN59LT.VT	DIODE	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	
D3001		1SS283	DIODE	1	
D3003,04		MA151WK	DIODE	2	
D3005		1SS254	DIODE	1	
D7005		1SS254	DIODE	1	
D7021-30		1SS254	DIODE	10	
D7031		MA4220	DIODE	1	
DP7001		VSL0337	DISPLAY TUBE	1	
IC0701		LA7576	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC1001		HA17431PA	IC	1	
IC2001		XRA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1BO	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850P	IC	1	
IC3004		LA7356	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80011AP	IC	1	
IC7002		PST7043	IC	1	
IC7004		PNA4601M02VT	TRANSISTOR	1	
IC7005		M34240V1BQ	IC	1	
JK3001		VJJ0391	JACK	1	
K0702,03		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K0706		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7609		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L0701		VLQ0163JR22	COIL H	1	
L0706		VLQEL05S8R2K	COIL 8.2UH	1	
L0707		ELJFA100KB	COIL	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL H	1	
L3007		VLQ0599J151	COIL 150H	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	PEAKING COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL	1	
L7601,02		VLQ0599J680	COIL 68UH	2	
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL H	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE)	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR 4P	1	
P2003		VJP3630A010G	CONNECTOR	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR	1	
P4001		VJS3675A006B	CONNECTOR	1	
P4002		TJS118601T	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD25440PQA	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q1006		MSD1328	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	
Q7601		2SB709A-RS	TRANSISTOR	1	
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3008,09		MUN2213	TRANSISTOR-RESISTOR	2	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4002		MUN2212	TRANSISTOR-RESISTOR	1	
QR4003		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0721		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG112	M.RESISTOR CH 1/16W 1.1K	1	
R0727		ERJ3GEYG821	M.RESISTOR CH 1/16W 820	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2077		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2085		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3035		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3040		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R3041		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3050		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4020		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7016-19		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	4	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7605		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7606		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
S2001		VES0709	SWITCH	1	
S7019,20		EVQ11407K	SWITCH	2	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC072A	TRANSFORMER	1	
T0711		EQS5EC032A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFOMMER	1	
TU7601		ENG47229G	TUNER	1	<!>
VC2016		ECRHA020DS4R	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCT5R5MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCWS2F11T	CRYSTAL OSCILLATOR	1	
X0704		VLF1072	CRYSTAL OSCILLATOR	1	
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	
		VXQ0424	FIP HOLDER	1	
		VEE9675	WIRE CABLE	1	P4002-FE. HEAD
		VEE9223	WIRE CABLE	1	P2505-POWER TR.
		VWJ0904	FLAT CARD CABLE	1	P2506-P1507
		VWJ0957	FLAT CARD CABLE	1	P3001-P501
		VWJ0958	FLAT CARD CABLE	1	P2502-CYL. UNIT
		VXA5536	JACK BOARD UNIT	1	
	■	VEP06996B	MAIN C.B.A.		(RTL)NV-SD250A
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0721,22		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	2	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2013		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2020,21		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	2	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7008		EECS5R5T473	E.CAPACITOR 5.5V 0.047F	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7016,17		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7704		ECUM1H300JCN	C.CAPACITOR CH 50V 30P	1	
C7705		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7706		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7707		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7708		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7711		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7712		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7713		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7714		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D1009		1SS254	DIODE	1	
D2001		LN59LT.VT	DIODE	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	
D3001		1SS283	DIODE	1	
D3004		MA151WK	DIODE	1	
D3005		1SS254	DIODE	1	
D7012		1SS254	DIODE	1	
D7021-23		1SS254	DIODE	3	
D7027-30		1SS254	DIODE	4	
D7031		MA4220	DIODE	1	
D7701		SVC251SPA	DIODE	1	
DP7001		VSL0338	DISPLAY TUBE	1	
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC2001		XRA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1BP	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850P	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80041P	IC	1	
IC7002		PST7028	IC	1	
IC7003		PST7043	IC	1	
IC7004		PNA4601M02VT	TRANSISTOR	1	
IC7005		M34240V1BQ	IC	1	
IC7701		UPD6464CS505	IC	1	
JK3001		VJJ0391	JACK	1	
K0702,03		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K0706		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L0701		VLQ0163JR22	COIL H	1	
L0706		VLQEL05S8R2K	COIL 8.2UH	1	
L0707		ELJFA100KB	COIL	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL H	1	
L3007		VLQ0599J151	COIL 150H	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	PEAKING COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL	1	
L7601,02		VLQ0599J680	COIL 68UH	2	
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL H	1	
L7702		VLQ0599J330	COIL 33UH	1	
L7703		VLQ0599J4R7	COIL H	1	
L7704		VLQ0599J330	COIL 33UH	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE)	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR 4P	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2504		VJP1229T	CONNECTOR (MALE) 2P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR	1	
P4001		VJS3675A006B	CONNECTOR	1	
P4002		TJS118601T	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD25440PQA	TRANSISTOR	1	
Q1006		MSD1328	TRANSISTOR	1	
Q1007		2SD1991A	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3009		MUN2213	TRANSISTOR-RESISTOR	1	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0721		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG112	M.RESISTOR CH 1/16W 1.1K	1	
R0727		ERJ3GEYG821	M.RESISTOR CH 1/16W 820	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1013,14		ERDS1TJ471	C.RESISTOR 1/2W 470	2	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2031		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2034		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2050		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R2051		ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2085		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3049		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7006		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ6R8	C.RESISTOR 1/4W 6.8	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7705		ERJ6GMYJ512	M.RESISTOR CH 1/10W 5.1K	1	
R7706		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R7707		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7708		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7709		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
S2001		VES0709	SWITCH	1	
S7001,02		EVQ11407K	SWITCH	2	
S7011,12		EVQ11407K	SWITCH	2	
S7019,20		EVQ11407K	SWITCH	2	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC072A	TRANSFORMER	1	
T0711		EQS5EC032A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFOMMER	1	
TU7601		ENG47228G	TUNER	1	<!>
VC2016		ECRHA020D54R	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCT5R5MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCWS2F11T	CRYSTAL OSCILLATOR	1	
X0704		VLF1072	CRYSTAL OSCILLATOR	1	
X2001		VSX0660	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	
		VWJ0904	FLAT CARD CABLE	1	P2506-P1507
		VWJ0957	FLAT CARD CABLE	1	P3001-P501
		VWJ0958	FLAT CARD CABLE	1	P2502-CYL. UNIT
		VXA5538	JACK BOARD UNIT	1	
		VEE9675	WIRE CABLE	1	P4002-FE HEAD
		VEE9223	WIRE CABLE	1	P2505-POWER TR.
		VXQ0424	FIP HOLDER	1	
	■	VEP06996C	MAIN C.B.A.		(RTL)NV-SD250EA
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0721,22		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	2	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2006		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C2010		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2016		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2020,21		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	2	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7008		EECS5R5T473	E.CAPACITOR 5.5V 0.047F	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7016,17		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7701		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7704		ECUM1H300JCN	C.CAPACITOR CH 50V 30P	1	
C7705		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7706		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7707		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7708		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7711		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7712		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7713		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7714		ECEA1HKA010	E.CAPACITOR 50V 1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D1009		1SS254	DIODE	1	
D2001		LN59LT.VT	DIODE	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	
D3001		1SS283	DIODE	1	
D3004		MA151WK	DIODE	1	
D3005		1SS254	DIODE	1	
D7012		1SS254	DIODE	1	
D7021-23		1SS254	DIODE	3	
D7027-30		1SS254	DIODE	4	
D7031		MA4220	DIODE	1	
D7701		SVC251SPA	DIODE	1	
DP7001		VSL0338	DISPLAY TUBE	1	
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC2001		XRA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1BP	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850P	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80041P	IC	1	
IC7002		PST7028	IC	1	
IC7003		PST7043	IC	1	
IC7004		PNA4601M02VT	TRANSISTOR	1	
IC7005		M34240V1BQ	IC	1	
IC7701		UPD6464CS505	IC	1	
JK3001		VJJ0391	JACK	1	
K0702,03		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K0706		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7609		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L0701		VLQ0163JR22	COIL H	1	
L0706		VLQEL05S8R2K	COIL 8.2UH	1	
L0707		ELJFA100KB	COIL	1	
L2002		VLP0085	COIL	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL H	1	
L3007		VLQ0599J151	COIL 150H	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	PEAKING COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL	1	
L7601,02		VLQ0599J680	COIL 68UH	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL H	1	
L7702		VLQ0599J330	COIL 33UH	1	
L7703		VLQ0599J4R7	COIL H	1	
L7704		VLQ0599J330	COIL 33UH	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE)	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR 4P	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR	1	
P4001		VJS3675A006B	CONNECTOR	1	
P4002		TJS118601T	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD25440PQA	TRANSISTOR	1	
Q1006		MSD1328	TRANSISTOR	1	
Q1007		2SD1991A	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	
Q7601		2SB709A-RS	TRANSISTOR	1	
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3009		MUN2213	TRANSISTOR-RESISTOR	1	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0721		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG112	M.RESISTOR CH 1/16W 1.1K	1	
R0727		ERJ3GEYG821	M.RESISTOR CH 1/16W 820	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1013,14		ERDS1TJ471	C.RESISTOR 1/2W 470	2	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2050		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R2051		ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2077		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2085		ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3049		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7006		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ6R8	C.RESISTOR 1/4W 6.8	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7605		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7606		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7705		ERJ6GMYJ512	M.RESISTOR CH 1/10W 5.1K	1	
R7706		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R7707		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7708		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7709		ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
S2001		VES0709	SWITCH	1	
S7001,02		EVQ11407K	SWITCH	2	
S7011,12		EVQ11407K	SWITCH	2	
S7019,20		EVQ11407K	SWITCH	2	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC072A	TRANSFORMER	1	
T0711		EQS5EC032A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFOMMER	1	
TU7601		ENG47229G	TUNER	1	<!>
VC2016		ECRHA020D54R	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCT5R5MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCWS2F11T	CRYSTAL OSCILLATOR	1	
X0704		VLF1072	CRYSTAL OSCILLATOR	1	
X2001		VSX0660	CRYSTAL OSCILLATOR	1	
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	
		VXQ0424	FIP HOLDER	1	
		VEE9675	WIRE CABLE	1	P4002-FE. HEAD
		VEE9223	WIRE CABLE	1	P2505-POWER TR.
		VWJ0904	FLAT CARD CABLE	1	P2506-P1507
		VWJ0957	FLAT CARD CABLE	1	P3001-P501
		VWJ0958	FLAT CARD CABLE	1	P2502-CYL. UNIT
		VXA5536	JACK BOARD UNIT	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP06996D	MAIN C.B.A.		(RTL)NV-SD250BA
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H300JPV	C.CAPACITOR CH 50V 30P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0722		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2013		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2020,21		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	2	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7008		EECS5R5T473	E.CAPACITOR 5.5V 0.047F	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7016,17		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7704		ECUM1H300JCN	C.CAPACITOR CH 50V 30P	1	
C7705		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7706		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7707		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7708		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7711		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7712		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7713		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7714		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D1009		1SS254	DIODE	1	
D2001		LN59LT.VT	DIODE	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	
D3001		1SS283	DIODE	1	
D3004		MA151WK	DIODE	1	
D7012		1SS254	DIODE	1	
D7018		1SS254	DIODE	1	
D7021-23		1SS254	DIODE	3	
D7027-30		1SS254	DIODE	4	
D7031		MA4220	DIODE	1	
D7701		SVC251SPA	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
DP7001		VSL0338	DISPLAY TUBE	1	
IC1001		HA17431PA	IC	1	
IC2001		XRA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1BP	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850AP	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80041P	IC	1	
IC7002		PST7028	IC	1	
IC7003		PST7043	IC	1	
IC7004		PNA4601M02VT	TRANSISTOR	1	
IC7005		M34240V1BQ	IC	1	
IC7701		UPD6464CS505	IC	1	
JK3001		VJJ0391	JACK	1	
K0702		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0705,06		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7607,08		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L0701		VLQ0163JR22	COIL H	1	
L0705		VLQ0163K4R7	COIL 4.7UH	1	
L0706		VLQEL05T120	COIL 12UH	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL H	1	
L3007		VLQ0599J151	COIL 150H	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	PEAKING COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL	1	
L7601,02		VLQ0599J680	COIL 68UH	2	
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL H	1	
L7702		VLQ0599J330	COIL 33UH	1	
L7703		VLQ0599J4R7	COIL H	1	
L7704		VLQ0599J330	COIL 33UH	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE)	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR 4P	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR	1	
P4001		VJS3675A006B	CONNECTOR	1	
P4002		TJS118601T	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD2544OPQA	TRANSISTOR	1	
Q1006		MSD1328	TRANSISTOR	1	
Q1007		2SD1991A	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	
QR0701		MRN1404	TRANSISTOR-RESISTOR	1	
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3009		MUN2213	TRANSISTOR-RESISTOR	1	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W .0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG122	M.RESISTOR CH 1/16W 1.2K	1	
R0727		ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0782		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1013,14		ERDS1TJ471	C.RESISTOR 1/2W 470	2	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2034		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2050		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R2051		ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2085		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3050		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7006		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ6R8	C.RESISTOR 1/4W 6.8	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7705		ERJ6GMYJ512	M.RESISTOR CH 1/10W 5.1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7706		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R7707		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7708		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7709		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
S2001		VES0709	SWITCH	1	
S7001,02		EVQ11407K	SWITCH	2	
S7011,12		EVQ11407K	SWITCH	2	
S7019,20		EVQ11407K	SWITCH	2	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC073A	TRANSFORMER	1	
T0711		EQS5EC032A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFOMMER	1	
TU7601		ENG47227G	TUNER	1	<!>
VC2016		ECRHA020D54R	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCWS6004T	CRYSTAL OSCILLATOR	1	
X0704		VLF1288	CRYSTAL OSCILLATOR	1	
X2001		VSX0660	CRYSTAL OSCILLATOR	1	
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLIANEOUS		
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	
		VWJ0904	FLAT CARD CABLE	1	P2506-P1507
		VWJ0957	FLAT CARD CABLE	1	P3001-P501
		VWJ0958	FLAT CARD CABLE	1	P2502-CYL. UNIT
		VXA5538	JACK BOARD UNIT	1	
		VEE9675	WIRE CABLE	1	P4002-FE HEAD
		VEE9223	WIRE CABLE	1	P2505-POWER TR.
		VXQ0424	FIP HOLDER	1	
	■	VEP05217A	HEAD AMP C.B.A.		(RTL)
C501,02		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C503,04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C505		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C506		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
IC501		AN3375S	IC	1	
L501		VLQ0599J101	COIL 100UH	1	
P501		VJS2331	CONNECTOR (FEMALE)	1	
P502		VJS3069	CONNECTOR (FEMALE)	1	
R501		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R502		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R503		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R504		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R505		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R506,07		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R508		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
			MISCELLANEOUS		
		VSC4208	SHIELD CASE(A)	1	
		VSC4209	SHIELD CASE(B)	1	
	■	VEP07795A	SWITCH C.B.A.		(RTL)NV-SD200AM
P6601		VJS3630B010B	CONNECTOR	1	
S6601,02		EVQ11407K	SWITCH	2	
S6604-06		EVQ11407K	SWITCH	3	
S6611,12		EVQ11407K	SWITCH	2	
S6614		EVQ11407K	SWITCH	1	
S6616		EVQ11407K	SWITCH	1	
S6617		ESD172252	SWITCH	1	
	■	VEP01621C	POWER C.B.A.		(RTL)<!>NV-SD200AM
C1101		ECKMWS331MBH	C.CAPACITOR	1	<!>
C1104		ECKMWS331MBH	C.CAPACITOR	1	<!>
C1110		ECQU2A333MV	P.CAPACITOR 250V 0.033U	1	
C1112		ECEC2GG680	E.CAPACITOR 400V 68U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KG	C.CAPACITOR 1KV 47P	1	
C1115		ECA1VGE470X	E.CAPACITOR 35V 47U	1	
C1116		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1120		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1121		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C1131		EEUFA1E331	E.CAPACITOR 25V 330P	1	
C1132		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A391B	E.CAPACITOR 10V 390P	1	
C1135		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1137		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1138		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1139		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1140		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1141		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1143		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1147		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1148		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1150		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
D1102		S1WBA60S	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA178	DIODE	1	
D1121		RL2Z	DIODE	1	
D1122		AK04	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		AK04	DIODE	1	
D1126		MA4043-L	DIODE	1	
D1127		1SS254	DIODE	1	
F1101		XBA2C16TB0	FUSE	1	<!>
IC1101		TDA4605-3	IC	1	
L1107,08		ELF18D290A	COIL 29UH	2	<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L1109		VLP0074	COIL	1	
L1110		VLP0085	COIL	1	
L1121		VLQ0611K220	COIL 22UH	1	
L1122		ELELE220KA	COIL 22UH	1	
L1123,24		ELESE101KA	COIL 100UH	2	
P1101		VJS3306	AC INLET	1	<!>
P1103		VJP3631A015W	CONNECTOR (MALE) 15P	1	
PR1101		VSF0015A10		1	<!>
Q1101		STP3N60FI-M	TRANSISTOR	1	<!>
Q1102		2SD1991A	TRANSISTOR	1	
Q1111		MOC8104T	TRANSISTOR	1	<!>
QR1101		UN6114	TRANSISTOR-RESISTOR	1	
R1101		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1102,03		ERG1SJ273	M.RESISTOR 1W 27K	2	
R1104		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R1107		ERDS2FJ164	C.RESISTOR 1/4W 160K	1	
R1108		ERDS2FJ105	C.RESISTOR 1/4W 1M	1	
R1109		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1110		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1111		ERDS2FJ222	C.RESISTOR 1/4W 2.2K	1	
R1112		ERDS2FJ304	C.RESISTOR 1/4W 300K	1	
R1113		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1114		ERX12SJR75	M.RESISTOR 1/2W 0.75	1	
R1115		ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1116		ERDS2FJ100	C.RESISTOR 1/4W 10	1	
R1117		ERDS2FJ472	C.RESISTOR 1/4W 4.7K	1	
R1125		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1127		ERDS2FJ333	C.RESISTOR 1/4W 33K	1	
R1128		ERDS2FJ332	C.RESISTOR 1/4W 3.3K	1	
R1129		ERDS2FJ223	C.RESISTOR 1/4W 22K	1	
R1133		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1134		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1135		ERDS2FJ274	C.RESISTOR 1/4W 270K	1	
R1136,37		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	2	
R1138		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1139		ERDS2TJ475	C.RESISTOR 1/4W 4.7M	1	
S7511-14		EVQ11407K	SWITCH	4	
T1101		VLT0750	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		EYF52BC	FUSE HOLDER	1	<!>
		VMZ2212	CAPACITOR COVER	2	<!>
		VSC4205	POWER SHIELD COVER	1	
		VMP4593	POWER PLATE	1	
		VMZ2378	BARRIER	1	<!>
	■	VEP01621D	POWER C.B.A.		(RTL)<!>
					NV-SD250A/EA/BA
C1101		ECKMWS471MBH	C.CAPACITOR	1	<!>
C1104		ECKMWS471MBH	C.CAPACITOR	1	<!>
C1107		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1110		ECQU2A683MV	P.CAPACITOR 250V	1	
C1111		ECQU2A154MNB	P.CAPACITOR 250V 0.15U	1	<!>
C1112		ECEC2GG330	E.CAPACITOR 400V 33U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KG	C.CAPACITOR 1KV 47P	1	
C1115		ECA1VGE470X	E.CAPACITOR 35V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1116		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1120		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1121		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C1131		EEUFA1E331	E.CAPACITOR 25V 330P	1	
C1132		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A391B	E.CAPACITOR 10V 390P	1	
C1135		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1137		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1138		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1139		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1140		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1141		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1143		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1147		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1148		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1150		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
D1101		ENC471D5ATRB	DIODE	1	
D1102		S1WBA60S	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA178	DIODE	1	
D1121		RL2Z	DIODE	1	
D1122		AK04	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		AK04	DIODE	1	
D1126		MA4043-L	DIODE	1	
D1127		1SS254	DIODE	1	
F1101		XBA2C16TB0	FUSE	1	<!>
IC1101		TDA4605-3	IC	1	
L1108		ELF18D221F	COIL 220UH	1	<!>
L1109		VLP0074	COIL	1	
L1110		VLP0085	COIL	1	
L1121		VLQ0611K220	COIL 22UH	1	
L1122		ELELE220KA	COIL 22UH	1	
L1123,24		ELESE101KA	COIL 100UH	2	
P1101		VJS3306	AC INLET	1	<!>
P1103		VJP3631A015W	CONNECTOR (MALE) 15P	1	
PR1101		VSF0015A10		1	<!>
Q1101		STP3N60FI-M	TRANSISTOR	1	<!>
Q1102		2SD1991A	TRANSISTOR	1	
Q1111		MOC8104T	TRANSISTOR	1	<!>
QR1101		UN6114	TRANSISTOR-RESISTOR	1	
R1101		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1102,03		ERG1SJ273	M.RESISTOR 1W 27K	2	
R1104		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R1107		ERDS2FJ164	C.RESISTOR 1/4W 160K	1	
R1108		ERDS2FJ105	C.RESISTOR 1/4W 1M	1	
R1109		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1110		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1111		ERDS2FJ222	C.RESISTOR 1/4W 2.2K	1	
R1112		ERDS2FJ304	C.RESISTOR 1/4W 300K	1	
R1113		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1114		ERX12SJR75	M.RESISTOR 1/2W 0.75	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1115		ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1116		ERDS2FJ100	C.RESISTOR 1/4W 10	1	
R1117		ERDS2FJ472	C.RESISTOR 1/4W 4.7K	1	
R1122		ERC12AGM334	S.RESISTOR 1/2W 330K	1	
R1125		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1127		ERDS2FJ333	C.RESISTOR 1/4W 33K	1	
R1128		ERDS2FJ332	C.RESISTOR 1/4W 3.3K	1	
R1129		ERDS2FJ223	C.RESISTOR 1/4W 22K	1	
R1133		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1134		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1135		ERDS2FJ274	C.RESISTOR 1/4W 270K	1	
R1136,37		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	2	
R1138		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1139		ERDS2TJ475	C.RESISTOR 1/4W 4.7M	1	
S7511-14		EVQ11407K	SWITCH	4	
T1101		VLT0749	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		EYF52BC	FUSE HOLDER	1	<!>
		VMZ2212	CAPACITOR COVER	3	<!>
		VSC4205	POWER SHIELD COVER	1	
		VMP4593	POWER PLATE	1	
		VMZ2378	BARRIER	1	<!>
	■	----------	CYLINDER STATOR C.B.A.		(RTL)
			MISCELLANEOUS		
		HW-300A-CF	HALL IC	1	
		VJS3537F009G	CONNECTOR (FEMALE) 9P	1	
	■	----------	RT CONNECTOR C.B.A.		(RTL)
			MISCELLANEOUS		
		VJP3578	HEAD AMP CONNECTOR	1	
	■	----------	MOTOR C.B.A.		(RTL)
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (FEMALE) 2P	1	

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Order No. VRD9601S002

Service Manual

Video Product

Supplement

Effective from : First Production

Model No. NV-SD200A/BA
NV-SD200AM
NV-SD205AM
NV-SD250A/EA/BA

Subject : Correction of Parts List

Please use this manual together with the Service Manual for Order No. VRD9508M127 Model No. NV-SD200A/BA, NV-SD205AM and Order No. VRD9507M122 Model No. NV-SD200AM, NV-SD250A/EA/BA.

■ The following parts has been Corrected.

IMPORTANT SAFETY NOTICE :
COMPONENTS IDENTIFIED THE MARK < ! > HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

■ NV-SD200A/BA, SD205AM

INTERCHANGEABILITY CODE — See the I/C column on the following Part Number list

	Parts	Prdctn		Parts	Prdctn		Parts	Prdctn		Parts	Prdctn		
	Parts	Prdctn		Parts	Prdctn		Parts	Prdctn		Parts	Prdctn	E	Addition
A	Orgnl	Early	B	Orgnl	Early	C	Orgnl	Early	D	Orgnl	Early	F	Deletion
	New	Late		New	Late		New	Late		New	Late	G	Other

Parts Number List

Ref. No	Part No.	Part Name & Description		I/C	Remarks
		Original	Correction		
	■MAIN C.B.A.				
C1002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C1007	ECA1CM101	E. CAPACITOR 16V 10U	E. CAPACITOR 16V 100U	G	
C2015	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2036	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2519	ECEA1HKNR22	E. CAPACITOR 50V 0.22	E. CAPACITOR 50V 0.22U	G	
C2521	ECUM1E333KBN	C. CAPACITOR 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2522	ECUM1E333KBN	C. CAPACITOR 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2526	ECUM1E333KBN	C. CAPACITOR 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C3019	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C3053	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4011	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C7006	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
L3007	VLQ0599J151	COIL 150H	COIL 150UH	G	
R3032	ERJ6GMYK125	M. RESISTOR CH 1/10W 1.5M	M. RESISTOR CH 1/10W 1.2M	G	
R3046	ERJ6GMYJ104	M. RESISTOR CH 1/10W 1M	M. RESISTOR CH 1/10W 100K	G	NV-SD200A, 205AM
	■POWER C.B.A.				
C1110	ECQU2A683MV	P. CAPACITOR 250V	P. CAPACITOR 100V 0.068U	G	NV-SD200A/BA
C1110	ECQU2A333MV	P. CAPACITOR 250V 0.033U	P. CAPACITOR 100V 0.033U	G	NV-SD205AM
C1111	ECQU2A154MNB	P. CAPACITOR 250V 0.15U	P. CAPACITOR 100V 0.15U	G	< ! >
C1131	EEUFA1E331	E. CAPACITOR 25V 330P	E. CAPACITOR 25V 330U	G	
C1134	EEUFA1A391B	E. CAPACITOR 10V 390P	E. CAPACITOR 10V 390U	G	

Panasonic

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

■The following parts has been Corrected.

IMPORTANT SAFETY NOTICE :

COMPONENTS IDENTIFIED THE MARK < ! > HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

■NV-SD200AM, SD250A/EA/BA

INTERCHANGEABILITY CODE — See the I/C column on the following Part Number list

	Parts	Prdctn		Parts	Prdctn		Parts	Prdctn		Parts	Prdctn	E	Addition
A	Orgnl	Early	B	Orgnl	Early	C	Orgnl	Early	D	Orgnl	Early	F	Deletion
	New	Late		New	Late		New	Late		New	Late	G	Other

Parts Number List

Ref. No.	Part No.	Part Name & Description Original	Part Name & Description Correction	I/C	Remarks
	■MAIN C.B.A.				
C1002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C1006	ECA1CM470	E. CAPACITOR 16V	E. CAPACITOR 16V 47U	G	
C1007	ECA1CM101	E. CAPACITOR 16V 10U	E. CAPACITOR 16V 100U	G	
C2015	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2036	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2519	ECEA1HKNR22	E. CAPACITOR 50V 0.22	E. CAPACITOR 50V 0.22U	G	
C2521	ECUM1E333KBN	C. CAPACITOR CH 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2522	ECUM1E333KBN	C. CAPACITOR CH 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2526	ECUM1E333KBN	C. CAPACITOR CH 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C3019	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C3053	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4011	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C7006	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C7711	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	NV-SD250A/EA/BA
IC7004	PNA4601M02VT	TRANSISTOR	INTEGRATED CIRCUIT	G	
L3006	ELESE820JA	COIL H	COIL 82UH	G	
L3007	VLQ0599J151	COIL 150H	COIL 150UH	G	
L4003	ELESE471KA	COIL	COIL 470UH	G	
L7607	ELESN680KA	COIL H	COIL 68UH	G	
L7703	VLQ0599J4R7	COIL H	COIL 4.7UH	G	NV-SD250A/EA/BA
R3032	ERJ6GMYK125	M. RESISTOR CH 1/10W 1.5M	M. RESISTOR CH 1/10W 1.2M	G	
R3046	ERJ6GMYJ104	M. RESISTOR CH 1/10W 1M	M. RESISTOR CH 1/10W 100K	G	
R7706	ERJ6GMYJ104	M. RESISTOR CH 1/10W 1M	M. RESISTOR CH 1/10W 100K	G	NV-SD250A/EA/BA
	■POWER C.B.A.				
C1110	ECQU2A333MV	P.CAPACITOR 250V 0.033U	P.CAPASITOR 100V 0.033U	G	NV-SD200AM
C1110	ECQU2A683MV	P.CAPACITOR 250V	P.CAPASITOR 100V 0.068U	G	NV-SD250A/EA/BA
C1111	ECQU2A154MNB	P.CAPACITOR 250V 0.15U	P.CAPASITOR 100V 0.15U	G	< ! > NV-SD250A/EA/BA
C1131	EEUFA1E331	E. CAPACITOR 25V 330P	E. CAPACITOR 25V 330U	G	
C1134	EEUFA1A391B	E. CAPACITOR 10V 390P	E. CAPACITOR 10V 390U	G	

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Order No. VRD9701S002

Service Manual

Supplement

Video Product

Effective from : Mentioned Below

Model No. Mentioned Be

Subject : Change of Parts

Please use this service manual together with the service manual for Order No. and Model No. Mentioned Below

MODEL NO.	ORDER NO.
NV-SD260EG/EGH/B,SD410EG/EGH	VRD9604M109
NV-HD610EG/EGH/B/EC,HD605B/BL	VRD9604M112
NV-HD610F/PS,HD605F	VRD9606M119
NV-SD260ER,SD410ER/B/BL	VRD9605M113
NV-SD410F/PS	VRD9606M117
NV-HD660EG/EGH/B/EC	VRD9608M120
NV-HD660F	VRD9609M124
NV-SD460EG/EGH	VRD9608M121
NV-SD460F	VRD9609M125
NV-SD200B	VRD9506M121,VRD9605S016
NV-SD200EG/EI/BI	VRD9508M123,VRD9605S016
NV-SD200EGH,SD250EGH,SD300EGH SD450EGH,HD650EGH,HS900EGH	VRD9512M159,VRD9605S016
NV-SD450EG	VRD9509M138
NV-SD450B	VRD9509M140
NV-SD450F	VRD9511M150
NV-SD450EEM,HD650EEM	VRD9606M122
NV-SD450A/EA	VRD9511M152
NV-SD350AM,SD450EU/EE	VRD9511M154
NV-HD650EG	VRD9509M137
NV-HD650B/EC	VRD9509M139
NV-HD650F	VRD9511M149
HD650EE/AM/BD,HD655AM	VRD9511M153
NV-HD650A/EA	VRD9511M151
NV-HD650MK2A	VRD9608M123
NV-SD200F/PS	VRD9510M141,VRD9605S016
NV-SD250EG	VRD9510M143,VRD9605S016
NV-SD300EG/EI	VRD9509M128,VRD9605S016
NV-SD300F	VRD9511M147,VRD9605S016
NV-HS900EG	VRD9511M156
NV-HS900B/EC	VRD9604M111
NV-HS900F	VRD9602M104
NV-SD200AM,SD250A/EA/BA	VRD9507M122
NV-SD200AMM,SD205AMM	VRD9511M145
NV-SD205AM,SD200A/BA	VRD9508M127
NV-SD205EU,SD207EE	VRD9508M126
NV-SD190BA	VRD9512M146
NV-SD55CMC	VRD9603M106

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Effective From : Running Change

INTERCHANGEABILITY CODE See the I/C column on the following Part Number List

	Parts	Production		Parts	Production		Parts	Production		Parts	Production		
A	Original	Early	B	Original	Early	C	Original	Early	D	Original	Early	E	Addition
	New	Late		New	Late		New	Late		New	Late	F	Deletion
												G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
R1118	JUMPER WIRE	ERG1SJ100E	RESISTOR	B	*1
C1101	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*2 ⚠
C1102	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*2 ⚠
C1103	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*2 ⚠
C1105	ECQU2A154MV	ECQU2A154MVA	CAPACITOR	B	*2 ⚠
C1106	ECQU2A154MV	ECQU2A154MVA	CAPACITOR	B	*2 ⚠
C1101	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*3 ⚠
C1104	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*3 ⚠
C1107	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*3 ⚠
C1110	ECQU2A104MV	ECQU2A104MVA	CAPACITOR	B	*3 MBV ⚠
C1111	ECQU2A104MV	ECQU2A104MVA	CAPACITOR	B	*3 MBV ⚠
C1101	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*4 ⚠
C1104	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*4 ⚠
C1107	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*4 ⚠
R1118	ERJ8GEY0R00	ERG1SJ100E	RESISTOR	C	*5
W6	JUMPER WIRE	————	JUMPER WIRE	F	*3
R1118	————	ERG1SJ100E	RESISTOR	E	*3

*1 : NV-SD200AM,SD200AMM,SD205AM,SD205AMM,SD250A/EA/BA,SD200A/BA,SD205EU,207EE,SD190BA,SD55CMC
NV-SD200B/BI/EG/EGS/EGN/EGH/EI/F/PS,SD250EG/EGH,SD300EG/EGH/EI/F,SD260B/EG/EGS/EGN/EGH/ER
NV-SD410B/BL/EG/EGS/EGN/EGH/ER/F/PS

*2 : NV-HS900EG/EC/B/EGH/F

*3 : NV-HD610EG/B/EC/EGH/F/PS,HD660EG/EGH/B/EC/F,HD605B/BL/F,SD460EG/EGH/F
POWER C.B.A.(VEP01763) has been changed.

*4 : NV-SD200B/BI/EG/EGS/EGN/EGH/EI/F/PS,SD250EG/EGH,SD300EG/EGH/EI/F,SD260B/EG/EGH/EGS/EGN/ER
NV-SD410B/BL/EG/EGS/EGN/EGH/ER/F/PS

*5 : NV-SD450EG/B/F/EE/EGH/EEM/A/EA/EU,SD350AM,HD650EG/B/EC/F/EE/EGH/EEM/A/EA/AM/BD/MK2A,HD655AM
MAIN C.B.A.(VEP06980) has been changed.

Order No. VRD9704002S3

Service Manual

Supplement

Effective from : Mentioned Below

Video Product

Model No. Mentioned Below

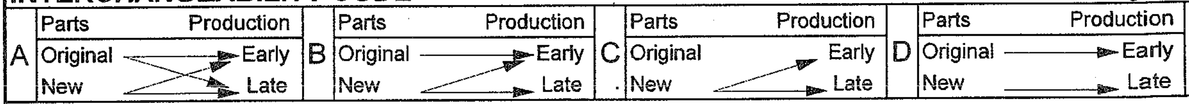
Subject : Change of Parts

Please use this service manual together with the service manual for Order No. and Model No. Mentioned Below

MODEL NO.	ORDER NO. ✓	MODEL NO.	ORDER NO.
NV-SD200AM,SD250A/EA/BA	VRD9507M122 V15181	NV-HP3MCAN	VRD9510M136
NV-SD200AM M,SD205AM M	VRD9511M145 V15006	NV-P03RM2AMD	VRD9502M107
NV-SD190BA	VRD9512M146 V15927	NV-SD320AM, SD420A/EA/SA/EU	VRD9611M126 V18004
NV-SD205AM,SD200A/BA	VRD9508M127 V14963	NV-SD350AM,SD450EU/EE	VRD9511M154 V15532
NV-SD205EU,SD207EE	VRD9508M126	NV-SD450A/EA	VRD9511M152
NV-P01M2AM,P03RM2AM, P04RM2EE	VRD9410M153	NV-SD400MK2A/M2EA	VRD9507M125
NV-HP3MCA	VRD9410M151	NV-SD407EE	VRD9506M117
NV-P05REE/REU	VRD9504M111	NV-SD407EE M,SD450EE M, HD600EE M,HD650EE M	VRD9606M122
NV-P01M2AMN,P03RM2AMN P04RM2EEN,P05REEN/REUN	VRD9510M135 V15120	NV-SD410AR/BR,HD610PM	VRD9605M114
		NV-SD460AR/BR/PM,HD660PM	VRD9607M118

Effective From : Z-MECHANISM MODEL : MAR. '97 Production
K-MECHANISM MODEL : Running Change

INTERCHANGEABILITY CODE See the I/C column on the following Part Number List



E Addition
F Deletion
G Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
73(1)	VEG1216	VEG1421	CYLINDER UNIT	A	*1
70/73(1)	VEG1221	VEG1420	CYLINDER UNIT	A	*2
73/75(1)	VXP1500	VXP1823	CYLINDER ROTOR UNIT	A	
70/73(1)	VEG1420	VEG1405	CYLINDER UNIT	A	*3
	VEH0715	VEH0841	UPPER CYLINDER UNIT	A	*3

*1 : NV-SD200AM/AM M/BA, SD190BA, SD205AM/AM M/EU, SD207EE, SD250A/EA/BA, P01M2AM/N, P03RM2AM/D/N, P04RM2EE/N, P05REE/N, P05REU/N, HP3MCA/N

*2 : NV-SD350AM, SD450A/EA/EU/EE/EE M, SD400M2EA, SD407EE/EE M, SD410AR, SD460AR

*3 : NV-SD320AM, SD420A/EA/SA/EU, SD350AM, SD450A/EA/EU/EE/EE M, SD400M2EA, SD407EE/EE M, SD410AR, SD460A

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VA513A

Order No. VRD9704003S3

Service Manual

Supplement

Effective from : B7T... (FEB. '97 Production)

Video Product

Model No. NV-SD200AM

Subject : Change of Parts

Please use this service manual together with the service manual for Order No. VRD9507M122, VRD9511S132 Model No. NV-SD200AM

INTERCHANGEABILITY CODE See the I/C column on the following Part Number List

	Parts	Production		Parts	Production		Parts	Production		Parts	Production		
A	Original	Early	B	Original	Early	C	Original	Early	D	Original	Early	E	Addition
	New	Late		New	Late		New	Late		New	Late	F	Deletion
												G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
T1101	VLT0750	VLT0749	TRANSFORMER	C	<!> SUPPLIED FROM MAV
C1114	ECCD3A470KG	ECCD3A151KG	CAPACITOR	C	SUPPLIED FROM MAV
L1102	JUMPER WIRE	VLP0083	COIL	C	
L1104	JUMPER WIRE	VLP0083	COIL	C	

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Order No. VRD9707026S8

Service Manual

Supplement

Video Product

Model No.Mentioned Below

Effective from : Running Change

Subject : Change of Parts for Remote Controller

Please use this service manual together with the service manual for Order No.Mentioned Below

No.	Model No.	Order No.	Subject
1	NV-HD600A/EA/BD	VRD9507M129	Change of Parts for Remote Controller
	NV-HD600EC/B/BI V14060	VRD9506M116	
	~~NV-HD600EE~~	VRD9506M118	
	NV-HD600EEM,HD650EEM NV-SD450EEM,SD407EEM	VRD9606M122	
	NV-HD600EG V12159	VRD9505M114	
	NV-HD600F/PS V14946	VRD9507M130	
	NV-HD600MK2A,HD650MK2A	VRD9608M123	
	~~NV-HD650A/EA~~	VRD9511M151	
	NV-HD650EC/B V14971	VRD9509M139	
	NV-HD650EE/BD,HD655AM	VRD9511M153	V15531
	NV-HD650EG V14938	VRD9509M137	
	NV-HD650F V15300	VRD9511M149	
	NV-HD755AM V15005	VRD9511M155	
	NV-HS900EG V14972	VRD9511M156	
	NV-HS900EGH,HD650EGH NV-HD600EGH,SD400EGH NV-SD450EGH,SD300EGH NV-SD250EGH	VRD9512M159	
	NV-HS900F V16024	VRD9602M104	
	NV-HS900F P V18123	VRD9701M102	
	NV-SD250A/EA/BA V15181 ✓	VRD9507M122	
	NV-SD250EG V14970	VRD9510M143	
	NV-SD300EG/EI V14221	VRD9509M128	
	NV-SD300F V15544	VRD9511M147	
	~~NV-SD400A/EA/BA~~	VRD9411M156	
	NV-SD400EG/EI/B/BI V12461	VRD9505M108	
	NV-SD400F/PS V14943	VRD9507M131	
	~~NV-SD400MK2A/M2EA~~	VRD9507M125	
	~~NV-SD407EE~~	VRD9506M117	
	~~NV-SD450A/EA~~	VRD9511M152	
	NV-SD450B V14828	VRD9509M140	
	NV-SD450EE V15532	VRD9511M154	
	NV-SD450EG V14220	VRD9509M138	
	NV-SD450F V15301	VRD9511M150	

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INTERCHANGEABILITY CODE See the I/C column on the following Part Number List

A	Parts	Production	B	Parts	Production	C	Parts	Production	D	Parts	Production	E	Addition
	Original	Early		Original	Early		Original	Early		Original	Early	F	Deletion
	New	Late		New	Late		New	Late		New	Late	G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
402(5)	VYK6388	VYK7092	DOOR PANEL UNIT	B	#1
402(5)	VYK6110	VYK7092	DOOR PANEL UNIT	B	#2
402(5)	VYK6604	VYK7092	DOOR PANEL UNIT	B	#3
402(5)	VYK6367	VYK7104	DOOR PANEL UNIT	B	#4
402(5)	VYK6505	VYK7150	DOOR PANEL UNIT	B	#5

#1:NV-HD600A/EA/BD/EE/EEM/MK2A,HD650A/EA/BD/MK2A/EE/EEM,SD450A/EA/EE/EEM,SD407EE/EEM,HD755AM
NV-HD655AM,SD250A/EA/BA
#2:NV-SD400A/EA/BA/MK2A/M2EA
#3:NV-HD600B/BI,HD650B,SD450B,SD400B/BI
#4:NV-HD600EG/EGH/EC,HD650EG/EGH/EC,HS900EG/EGH,SD400EG/EGH/EI,SD450EG/EGH,SD300EG/EGH/EI
NV-SD250EG/EGH
#5:NV-HD600F/PS,HD650F,HS900F/F P,SD300F,SD400F/PS,SD450F

INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.
Do not order any parts according to these codes.

P. C. B.	FILM CODE
SYUGOU (MAIN,SW,HEAD AMP)	FUAI00–0297A
POWER	FUAI00–01621
VIF	FUAI00–07801

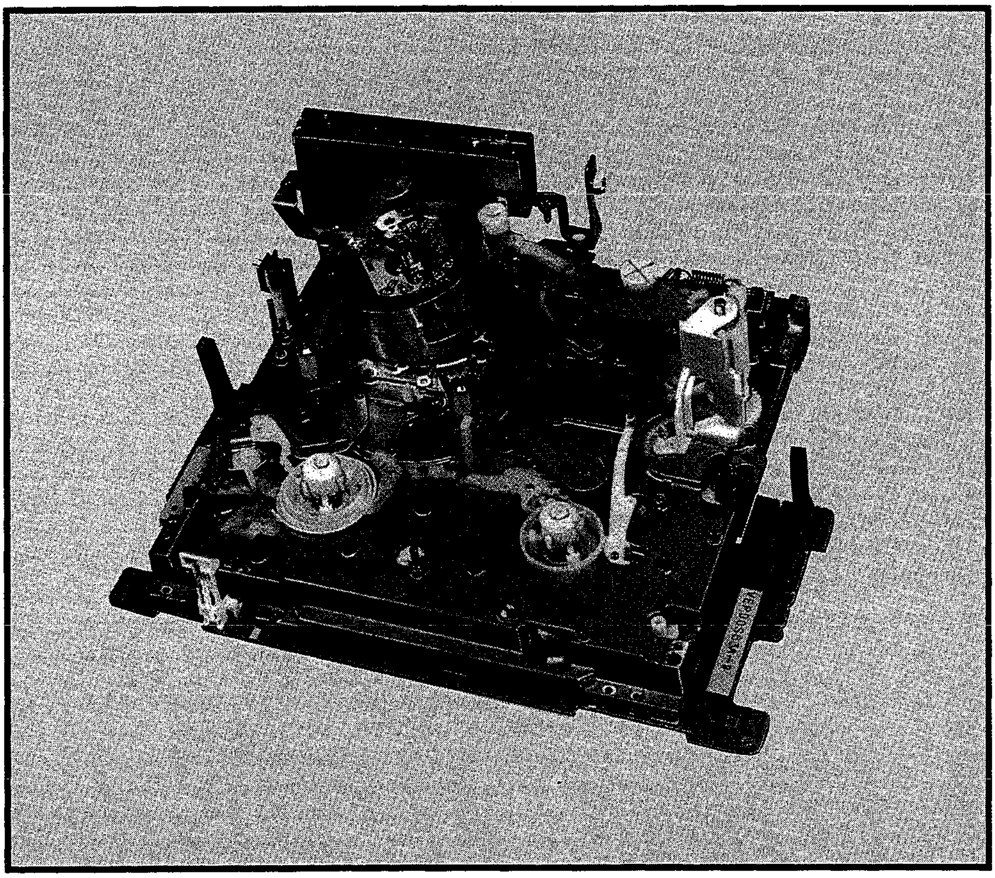
ORDER NO. VRD9307M131

Service Manual

Service Information
Adjustment Procedures
Assembly/Disassembly Procedures
Parts Change (~May '93)
Trouble Shooting

VHS Video Cassette Recorder
Mechanical chassis

No. K



IMPORTANT

The K-Mechanism chassis are built in several Panasonic VHS Video Cassette Recorders From NV-SD, HD series in 1992.
Thus, properly file this service manual with the service manuals of the relative video cassette recorders.

Panasonic

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1. SERVICE INFORMAION

1–1. SERVICE POSITION

When servicing the K–Mechanism, the Mechanism can easily be fixed by standing the Mechanism up in the Main Frame as shown below to check easily.

In this position, the following services are possible.

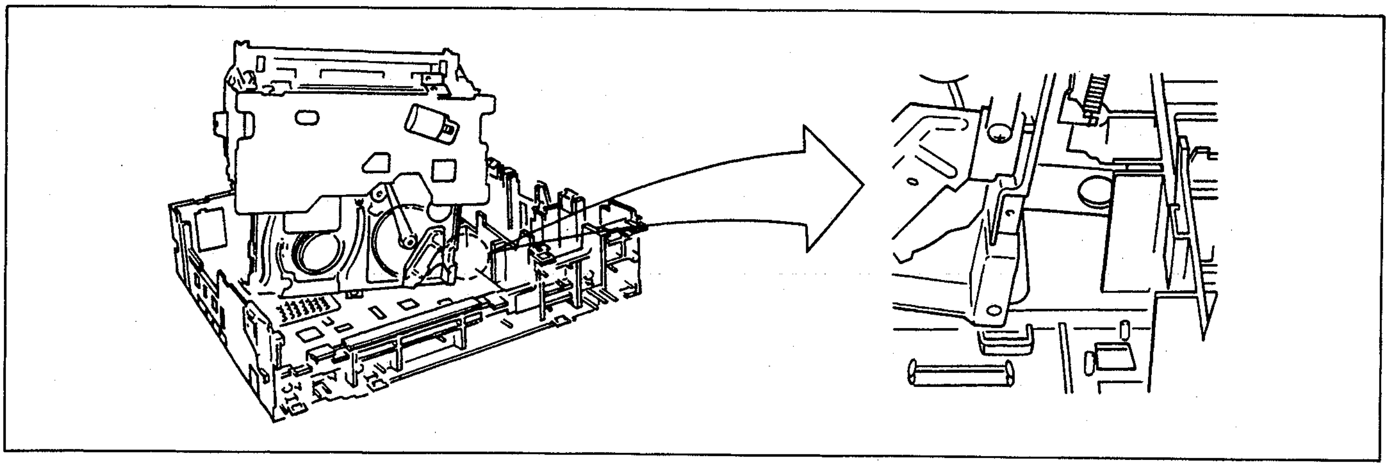


Fig. S1

1–1–1. CHECKING OF GEAR PHASE ALIGNMENT CONDITION

1) Remove the Mechanism Connection C.B.A.
2) Check gear phase Alignment Condition of Mechanism described on the left (NV–SD series) or bottom (NV–HD series) side of Frame.)

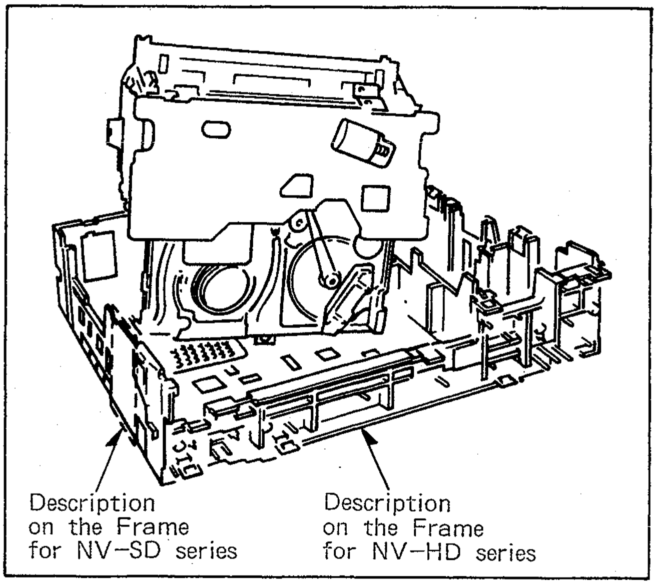

Description on the Frame for NV–SD series
Description on the Frame for NV–HD series

Fig. S2

1–1–2. Checking of Loading / Unloading Operation.

There are 3 methods for manual operation of loading/unloading operation as follows.

1. HAND OPERATION
   1) Remove the Mechanism Connection C.B.A.
   2) Turn the Worm Gear or the WORM WHEEL GEAR (Remove the loading Motor Unit) manually.

2. BATTERY OPERATION
   1) Remove the Mechanism Connection C.B.A.
   2) **Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) or Power Supply (+4.5V) to the Loading Motor terminals.**

3. SERVICE INFORMATION DISPLAY OPERATION
   1) Set the Service Information Display mode. (Turn the Shuttle Ring to FF then push the Eject button, or press the FF, REW and Eject buttons simultaneously.)
   2) Make a momentary short circuit as shown in the service manual, or press the TV/VTR button.(The end of display on the Display becomes "––".)

Note:

For NV–HD100AM/MC, NV–F125BD, NV–SD20EE, and NV–SD25AM, make a momentary short circuit between TL7508 and D7517–cathoid For NV–HD100AM/MC and NV–F12513D, or TL7508 and D7527–cathoid for NV–SD20EE and NV–SD25AM.

3) In the above Service Information Display mode, The Loading Motor rotates for loading operation when the "PLAY" button is pressed The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:

After checking, check the "SERVICE" INFORMATION DISPLAY" mode for final confirmation of movement of Mechanism.

1-1-3. Checking of operation of Reel Gears.

1) Remove the Mechanism Connection C.B.A.
2) Set mechanism to "PLAY" position by manual operation of loading.
3) Turn the "Rotor Unit" to check movement of reel gears.

1-2. REPLACEMENT OF CYLINDER UNIT

The Cylinder Unit can be replaced easily by the following method.

1) Remove the Top Panel.
2) Remove the 3 screws of the Cylinder Unit with a magnetized screw driver through the holes on the Bottom Plate as shown in Fig.S4.

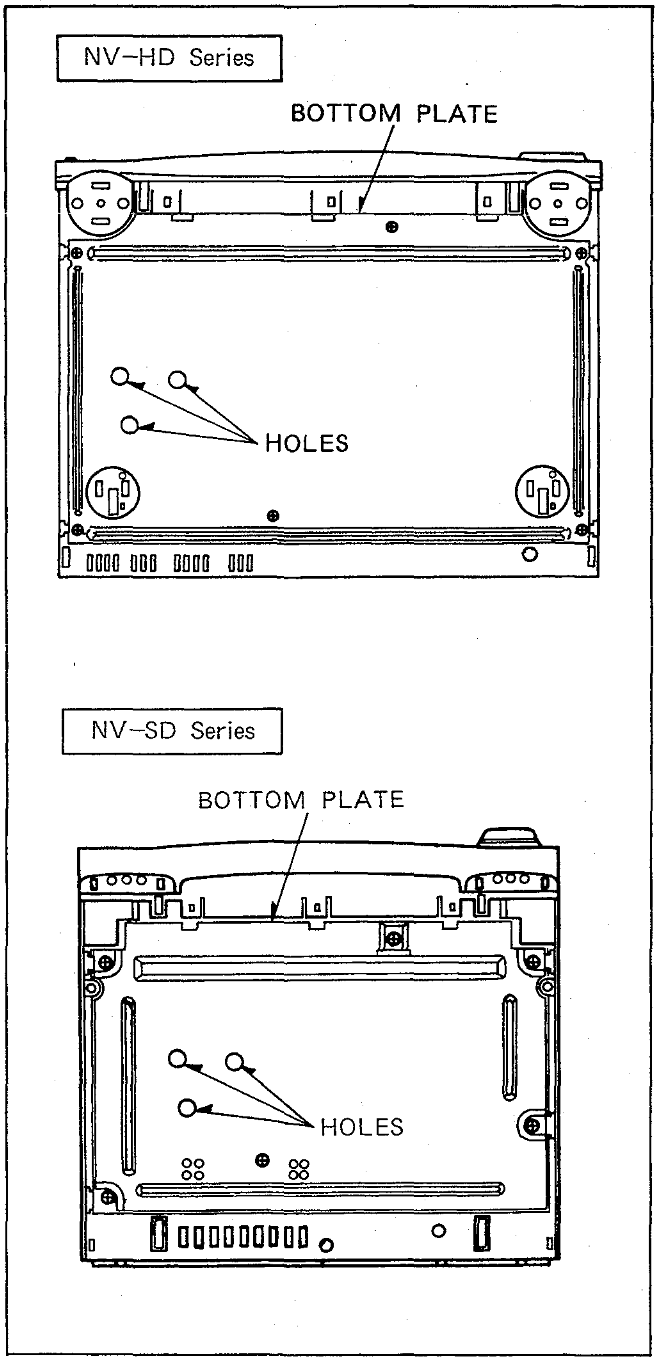

NV-HD Series
BOTTOM PLATE
HOLES
NV-SD Series
BOTTOM PLATE
HOLES

Fig. S4

1-3. ASSEMBLY OF CAPSTAN STATOR UNIT

When replacing the CAPSTAN STATOR UNIT, the CENTRE FIXING TOOL (VFK0851) must be used to fix the centre of CAPSTAN STATOR UNIT.

Method:

1) Place the CAPSTAN STATOR UNIT into position.
2) Loosely tighten the 3 screws.
3) Insert the CENTRE FIXING TOOL (VFK0851) as shown in Fig.S5.
4) Tighten the 3 screws.
5) Remove the CENTRE FIXING TOOL.

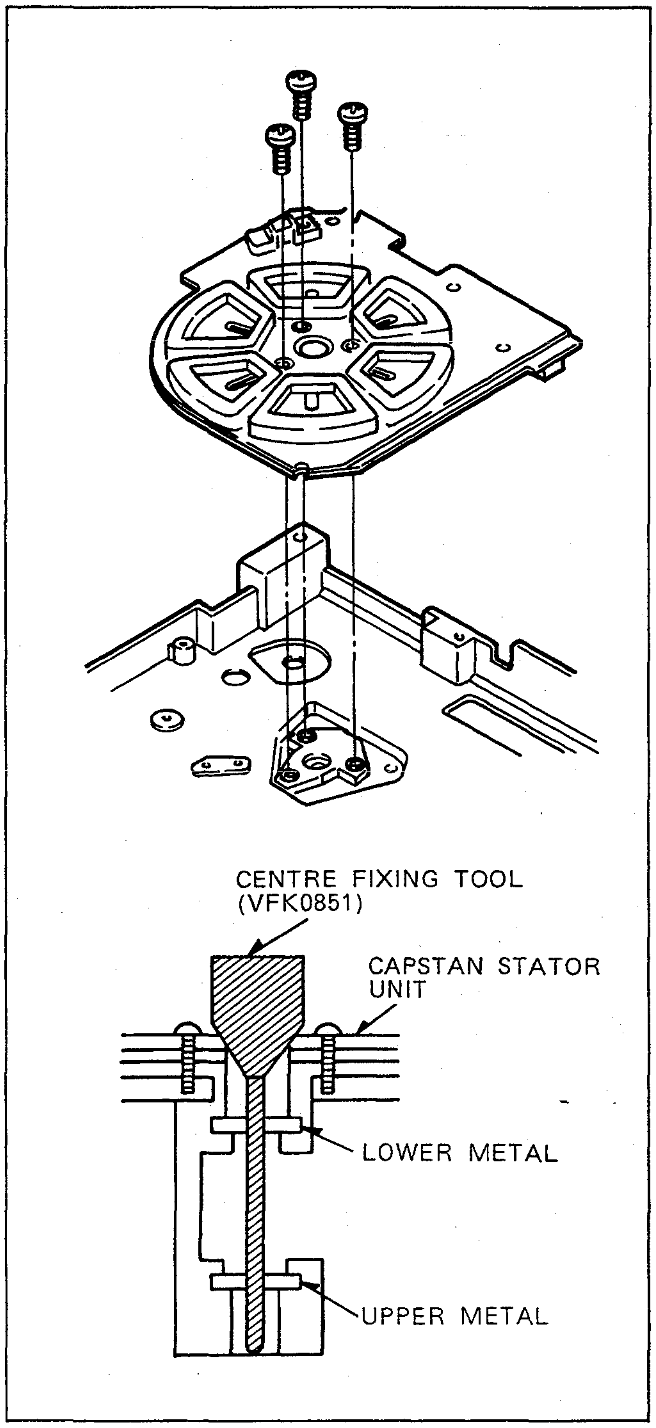

CENTRE FIXING TOOL (VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig. S5

1–4. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
For performing the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

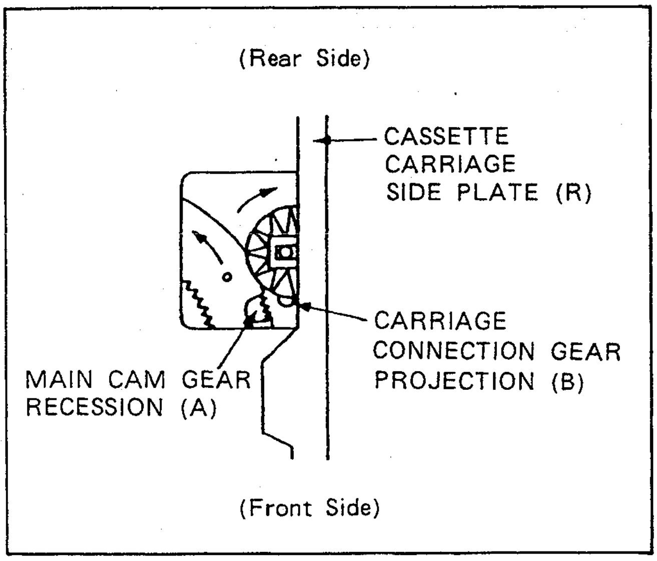

(Rear Side)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(Front Side)

Fig. S6 Top View of Eject Operation

1–5. TAKE–UP PHOTO SENSOR OPERATION

Note the following matters for Take–up Photo Sensor Operation.

1) While servicing of the K–Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take–up Photo Sensor.
   In this case, cover the Take–up Photo Sensor to prevent the light from falling on it.
2) While servicing of the K–Mechanism with "Power On" and without cassette tape inserted, the Unit does not operate properly.

1–6. SERVICING OF POWER TR C.B.A.

When removing the connector on the Power Tr. C.B.A., hold the P. C. Board by hand to prevent damage of the Power Tr.

1–7. REMOVAL OF THE CASSETTE TAPE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Remove the bottom plate.
2) Turn the WORM GEAR to "A" arrow mark direction manually as shown in Fig.S7, moving the LOADING POST to the unloaded position.
3) Turn the CAPSTAN clockwise to take up the tape.
4) Turn the WORM GEAR again to eject the **cassette.**

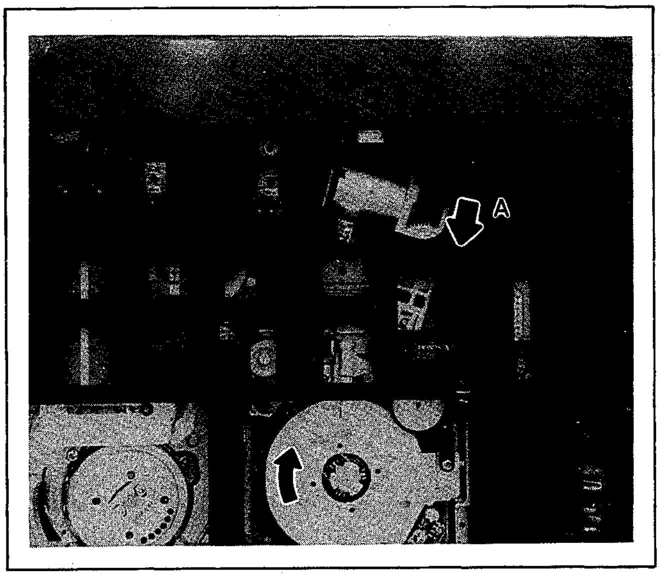


Fig. S7

2. BATTERY OPERATION

1) Connect the battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to P1503 as shown in Fig. S8.
2) After moving the LOADING POST to the unloaded position, disconnect the battery to stop the motor.
3) Turn the CAPSTAN to clockwise to take up the tape.
4) Reconnect the battery to eject the cassette.

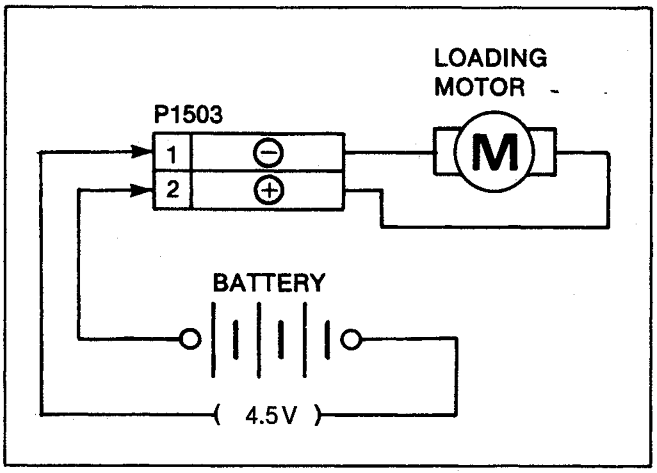


Fig. S8

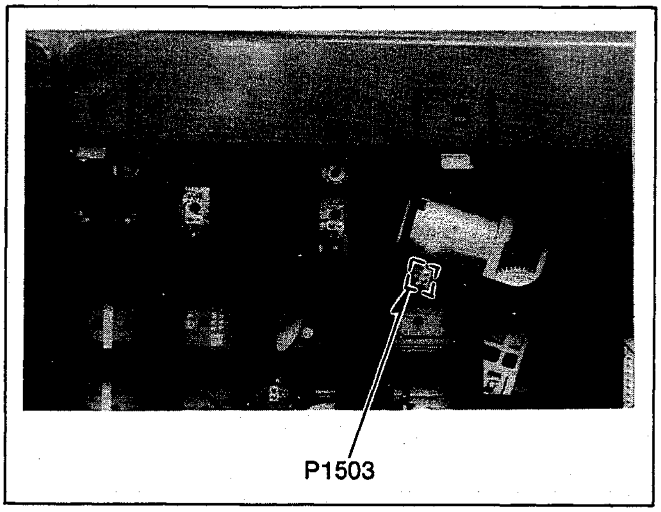


Fig. S9

1–8. INSTALLATION OF FLAT CARD CABLE

When installing of the Flat Card Cable to the connector, make sure the direction of the Flat Card Cable. The Insulation Sheet side is backside.

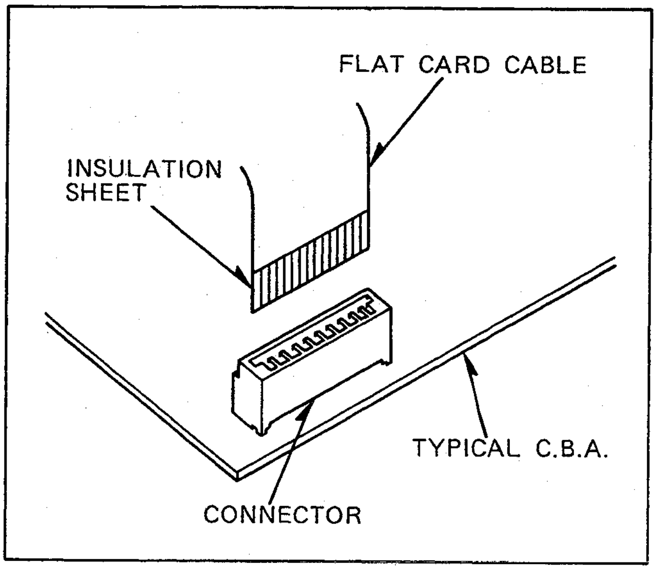

FLAT CARD CABLE
INSULATION SHEET
TYPICAL C.B.A.
CONNECTOR

Fig. S10

1–9. SERIAL CLOCK TRANSMISSION ERROR DISPLAY

If the Serial Clock is not transmitted from IC6001 to IC7501, "E9" is displayed as shown in Fig.T1. This indication will be displayed either during the Service Information Display mode or in normal mode.

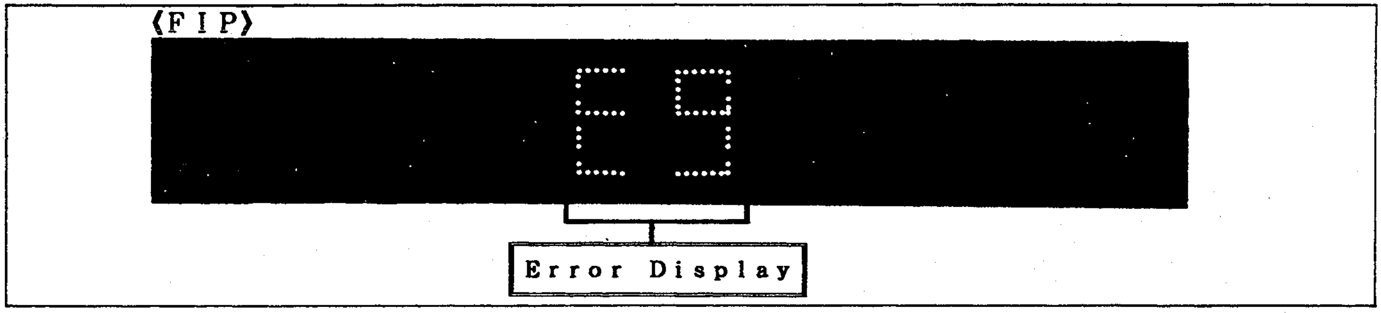

⟨F I P⟩
E9
Error Display

Fig. T1 Serial Data/Clock Transmission Error Display

1–10. SERVICE INFORMATION DISPLAY

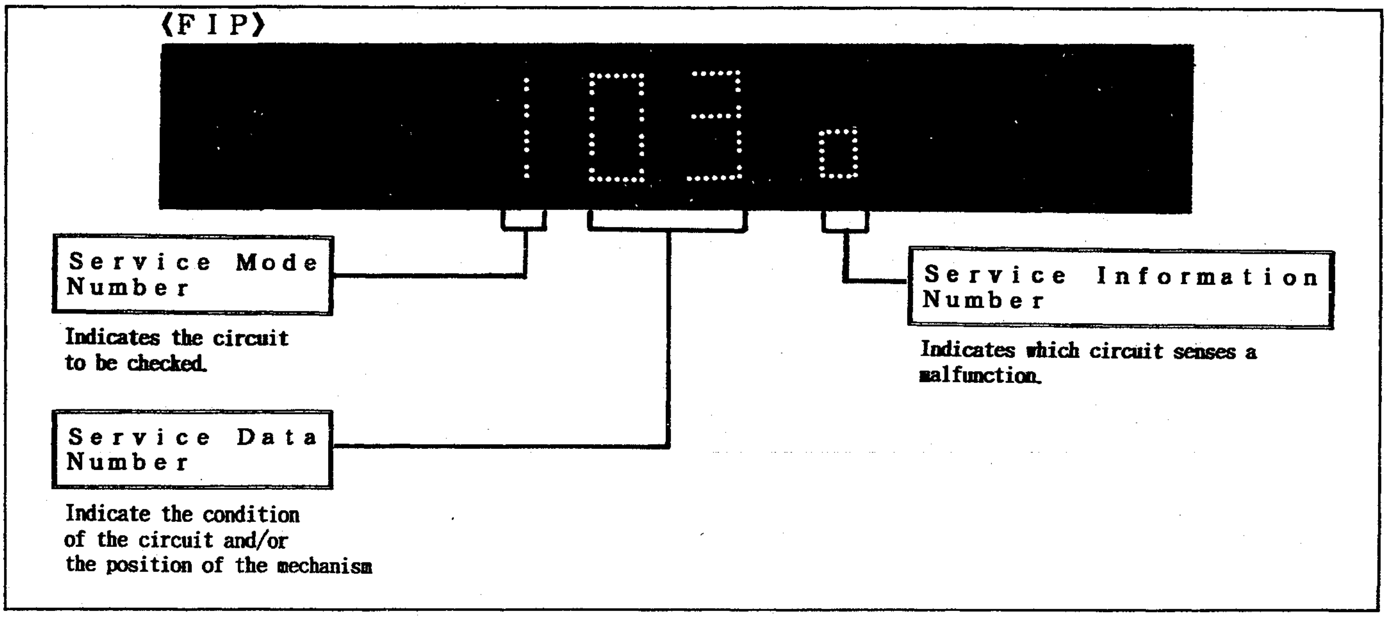

⟨F I P⟩
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicate the condition of the circuit and/or the position of the mechanism
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D1 Service Information Display

1–10–1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1–10–2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Turn the Shuttle Ring to FF then push the Eject button. The Service Information will be displayed for 1 minute.
(2) Connecting a jumper wire between TPSERV and TPGND For NV–SD series (TP6010 and TP6011 for NV–HD series) will display the service information indefinitely.

In the Service Information Display, there are four digits divided into 3 functions.
The first digit indicates which other 7 service modes that the unit is Currently in.

MODE 1 : Check tape protection circuit
MODE 2 : Check tape transport mechanism
MODE 3 : Check mode switching operation
MODE 4 : Check control buttons
MODE 5 : Check capstan motor
MODE 6 : Check cylinder motor
MODE 7 : Check loading/unloading operation

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service Information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied.

1−10−3. Use of Service Modes

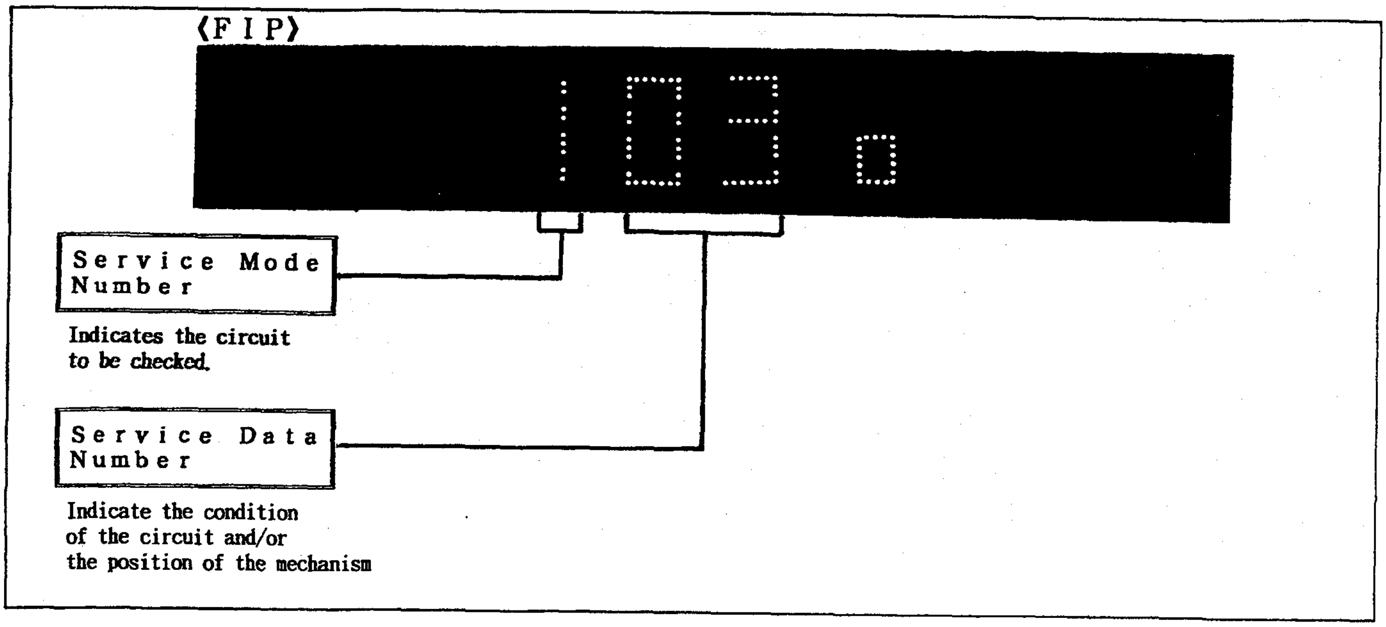
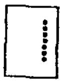

〈F I P〉
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicate the condition of the circuit and/or the position of the mechanism

Fig. D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.

(2) To change Service Modes turn the shuttle ring to FF then push the Eject button.

(3) Mode 1 : *Checks that the Sensor LED,* Supply & Take−up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take−up Sensors. When the light is blocked to both sensors, "00" should be indicated *on the service data number.* When the light is blocked to the supply sensor, "01" should be indicated.



(4) Mode 2 : Checks the mode switch circuit while indicating mechanism position. Service Data Numbers indicate the position of the mode switch and there by the mechanism position.

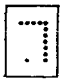
(5) Mode 3 : Checks that mode switch circuit operations have been completed. Service Data Number should indicate "00" after each mechanism operation is completed.

(6) Mode 4 : Checks the operation circuit. Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.

(7) Mode 5 : Checks the capstan motor circuit. Indicates if the IC6001 has received the command to rotate *the capstan motor.*

(8) Mode 6 : Checks the *cylinder motor* circuit. IC6001 has received the command to rotate the cylinder motor.

(9) Mode 7: Checks the Loading/Unloading Operation. The Loading Motor rotates for loading operation when the "PLAY" button pressed. The Loading Motor rotates For operation when the "STOP" button is pressed.



Note: This mode can be used by the System Control Microprocessor IC6001: MN67434VRSG or MN67434VRSH.

<NOTE>

Refer to Fig.D5 for details of Service Data Number.

1-10-4. Service Information Number

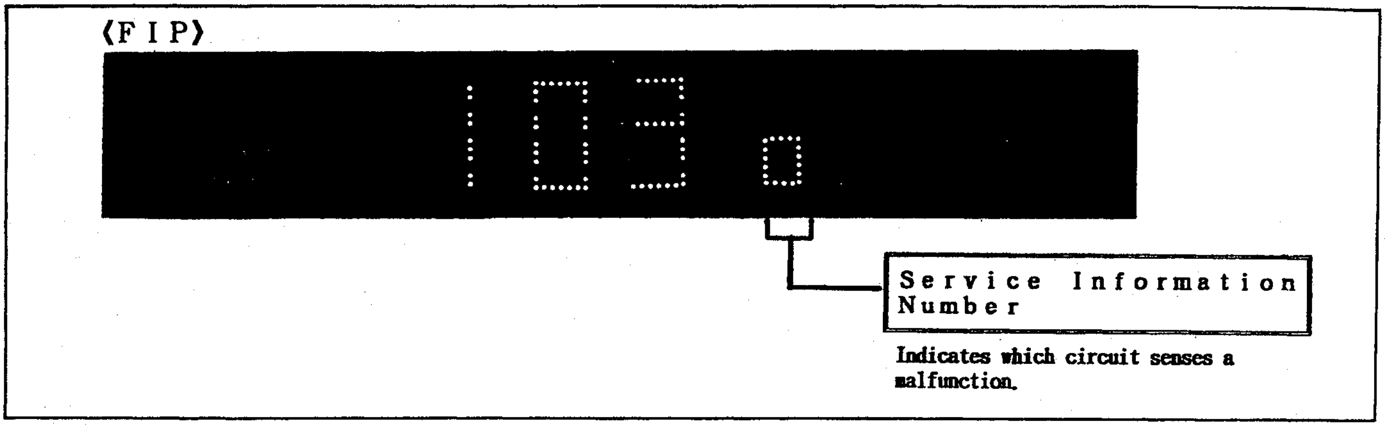

〈F I P〉
103
0
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D3 Service Information Number on S.I.D.

Refer to Fig.D4 for details of Service Information Number.

Note:
The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is supplied.
If a second error occurs, the most current error will be displayed.

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Falty capstan rotation
6	Stop during Cassette-In/Eject operation

Fig. D4 Service Information

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	—	00	No light detected at either sensor	Tape not required
		01	Tape Begining. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	—	00	EJECT	Tape Reuired *1 : STOP3 ; The Pinch Roller is on the capstan motor shaft. *2 : STOP ; The Pinch Roller is off the capstan motor shaft. Refer to Fig. D7 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 *1	
		05	STOP*2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6		Tape not required.
5	Left digit only, disregard Right digit display.	81 Left Digit Right Digit	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "PLAY" command recived by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	87 Left Digit Right Digit	1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor CUE, FF, Forward slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	8 Left Digit Right Digit	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor Reverse, Rew, Reverse Slow commands received by IC6001.	
6	Left digit only, disregard Right digit display.	10 Left Digit Right Digit	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

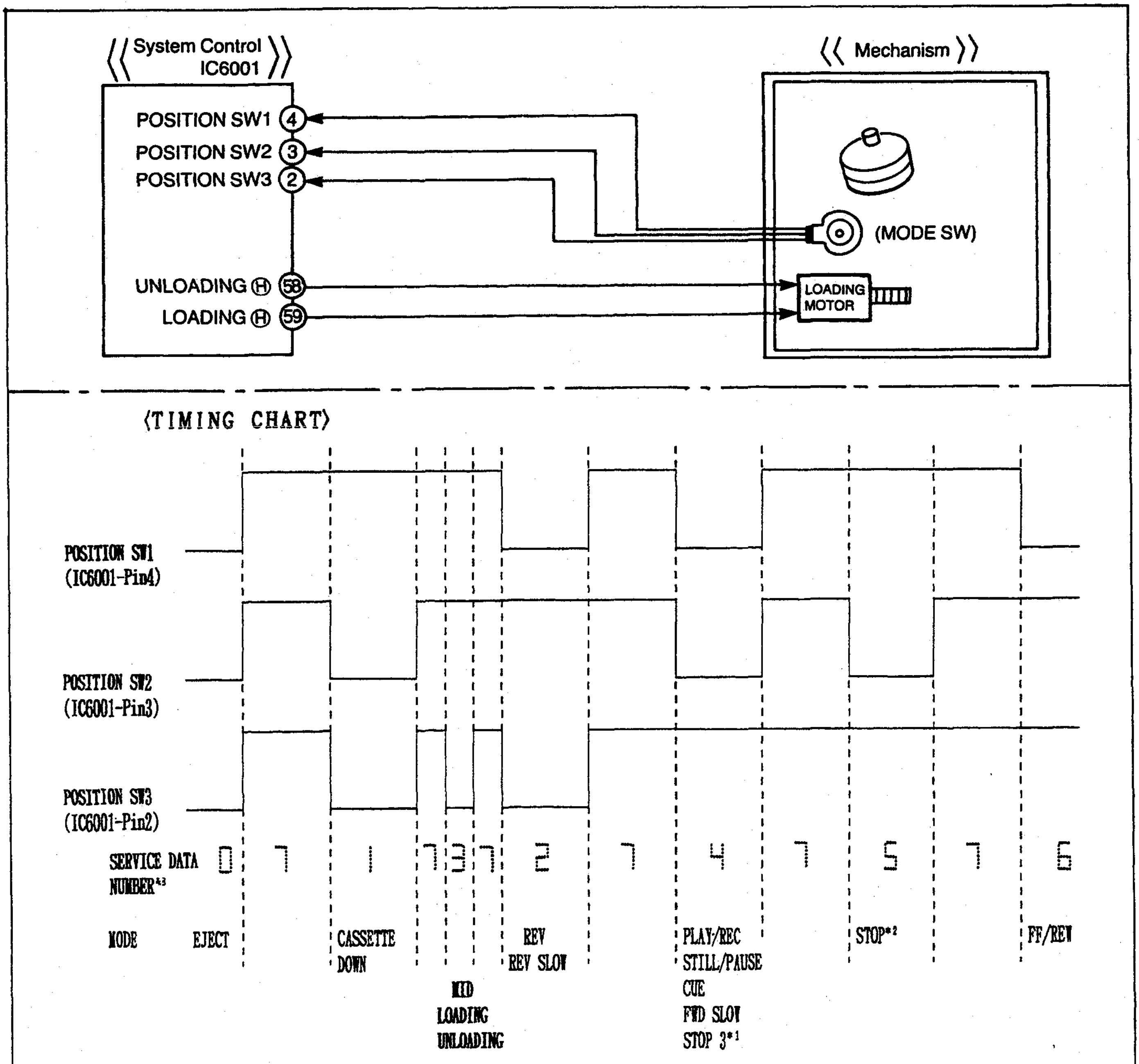
Fig. D5 Service Data Display and Indication

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	54	RESET
01	EJECT	5	ZERO STOP
09	AUDIO DUB	-0	INPUT SELECT
A3	INSERT	49, 4U	INDEX
-9	PAL/MESECAM	A1, A2	TRACKING(+, -)/V-LOCK
—	CHECK/PROG.	9	REPEAT
34 OR 35	∧∨, +−	8	SKIP
—	NEXT/SP/LP	—	TAPE SELECT
—	SLEEP/SHIFT	—	PROG.
A4	TIMER REC	—	NEXT
08	REC	—	RECORDING SP/LP
—	CLOCK SET	—	CANCEL
—	TUNER PRESET	10	SU(1)
80	PAUSE/STILL	11	MO(2)
0U	PLAY	12	TU(3)
00	STOP	13	WE(4)
0-, 0n	JOG DIAL (FRAME ADV, REVERSE ADV)	14	TH(5)
03, 02	SHUTTLE RING (FF, REW)	15	FR(6)
—	TV/VTR	16	SA(7)
—	SCANNER ON/OFF	17	SU~SA(8)
—	TRANSMIT	18	MO~SA(9)
0	SEARCH	19	MO~FR(0)
8L	+ (REMOTE CONTROLLER)	3A	-/--
8	- (REMOTE CONTROLLER)		
—	DISPLAY		

Fig. D6 Service Data Display for Service mode 4

1–10–5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position though the Mode SW.
Fig.D7 shows the timing for Service Mode Number 2.


System Control IC6001
POSITION SW1 4
POSITION SW2 3
POSITION SW3 2
UNLOADING Ⓗ 58
LOADING Ⓗ 59
Mechanism
(MODE SW)
LOADING MOTOR
〈TIMING CHART〉
POSITION SW1 (IC6001-Pin4)
POSITION SW2 (IC6001-Pin3)
POSITION SW3 (IC6001-Pin2)
SERVICE DATA NUMBER*3
0 7 1 7 3 7 2 7 4 7 5 7 6
MODE
EJECT
CASSETTE DOWN
MID LOADING UNLOADING
REV REV SLOW
PLAY/REC STILL/PAUSE CUE FWD SLOW STOP 3*1
STOP*2
FF/REW

*1 :Stop 3;The Pinch Roller is on the capstan motor shaft.

*2 :Stop ;The Pinch Roller is off the capstan motor shaft.

*3 :Service Data Number;This is for Service Mode Number2.

Fig. D7 Timing Chart of Mode SW

2. MECHANICAL ADJUSTMENT PROCEDURES

2–1. TENSION POST POSITION ADJUSTMENT

(Equipment Required)
Hex Wrench (VFK0326)

1. Disconnect the AC plug.
2. Remove the TOP PLATE and CASSETTE HOLDER.
3. Turn the LOADING MOTOR until the loading completes.
4. Adjust the hole of TENSION BAND FASTENER by hex wrench so that the left edge of IMPEDANCE ROLLER and TENSION ARM UNIT as shown in Fig.M1.

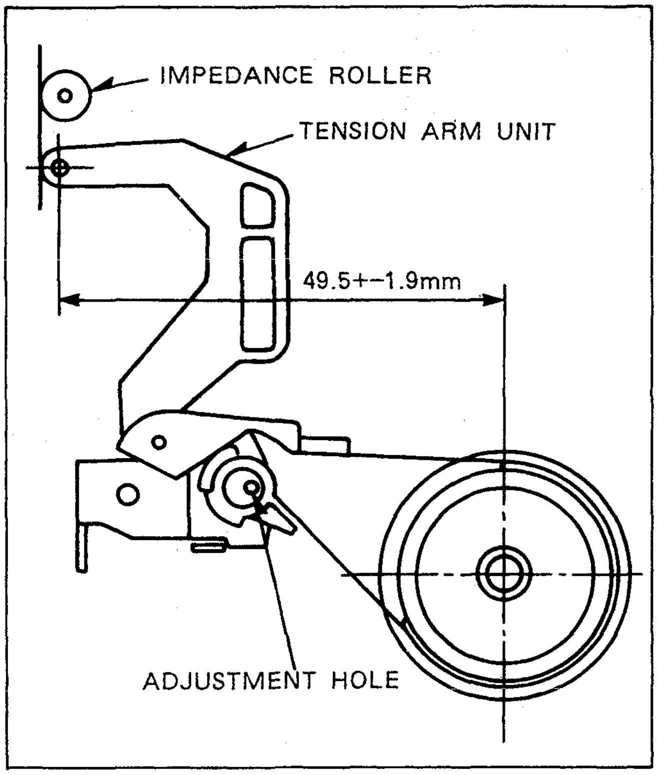


Fig. M1

2–2. BACK TENSION ADJUSTMENT

(Equipment Required)
Back Tension Meter (VFK0132)
VHS Cassette Tape (180 minutes tape: PAL)
(120 minutes tape: NTSC)

(Specification)
22.5–27.5g

1. Playback the cassette tape from the beginning and wait until the tape movement get the stabilization.
(for approx. 10∼20 seconds)
2. Insert the Back tension Meter into the path of a tape, and measure the back tension to be within specification as shown in Fig.M2.

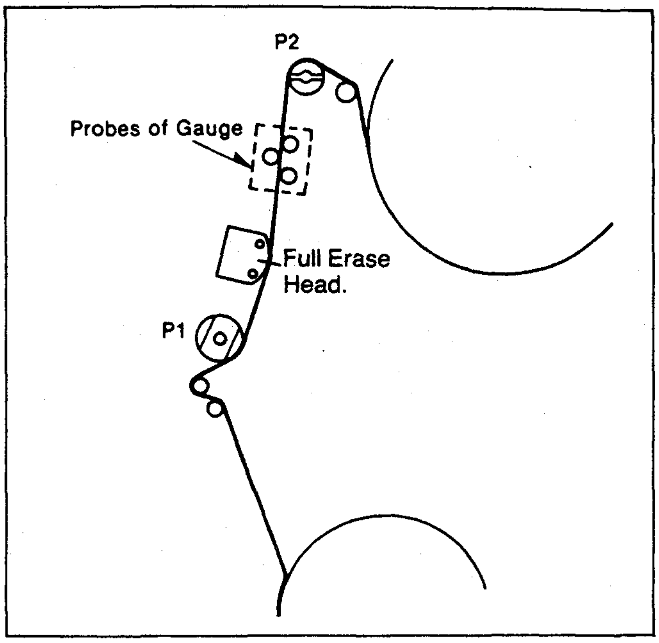


Fig. M2

3. If it is out of specification, change the spring notch as shown in Fig.M3.

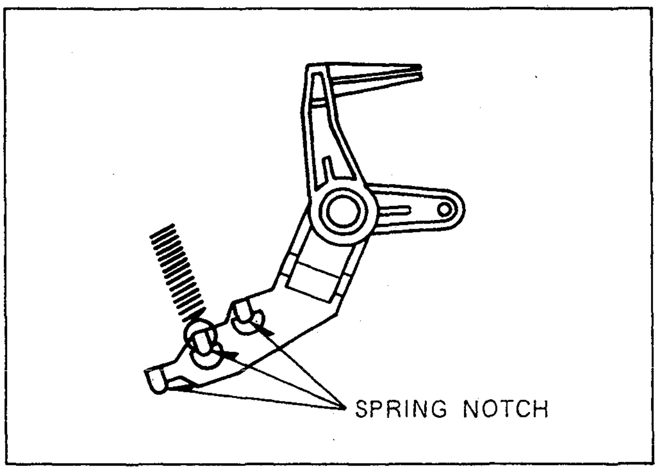


Fig. M3

2–3. P2 AND P3 POSTS ADJUSTMENT (PREADJUSTMENT)

(Equipment Required)
Post Adjustment Screwdriver (VFK0329)

1. Remove the TOP PLATE and CASSETTE HOLDER.
2. Turn the LOADING MOTOR until the unloading completes.
3. Loosen the fixing screw of P2 and P3 POSTS.
4. Rotate the P2 and P3 POSTS clockwise to the end.
5. Rotate the P2 and P3 POSTS twice counterclockwise.

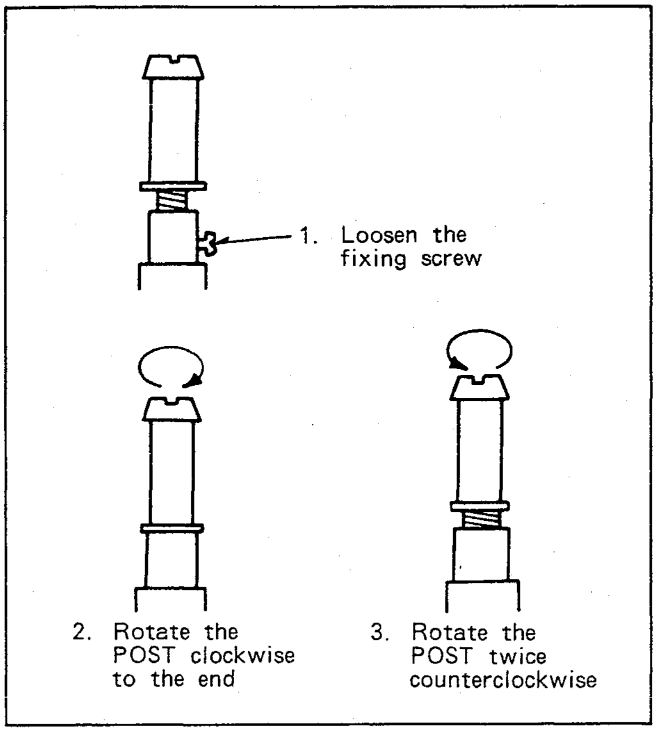

1. Loosen the fixing screw
2. Rotate the POST clockwise to the end
3. Rotate the POST twice counterclockwise

Fig. M4

6. Install the TOP PLATE and CASSETTE HOLDER
7. Playback the cassette tape and make sure that the edges of the tape are not curling at the bottom or top end of the P1, P2, P3 and P4 POSTS as shown in Fig.M5.

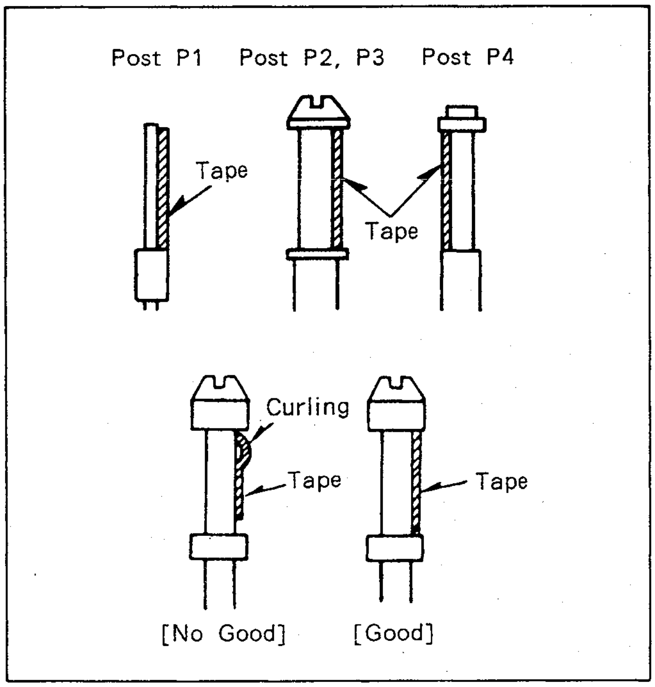

Post P1
Post P2, P3
Post P4
Tape
Tape
Curling
Tape
Tape
[No Good]
[Good]

Fig. M5

8. If curling appears, readjusts the P2 and P3 POSTS.

2–4. TAPE INTERCHANGEABILITY ADJUSTMENT

Carry out the following procedures for Tape interchangeability Adjustment to do it correctly and smoothly.

(1) Adjustment of P2 and P3 Posts.
(2) Height Adjustment of A/C Head (1).
(3) Height Adjustment of A/C Head (2).
(4) Fine–Adjustment of A/C Head
(5) Horizontal Position Adjustment of A/C Head.

If the Tape Interchangeability Adjustment is not perfect, repeat the above procedures from (1) to (5).

CAUTIONS:

To mark a Adjustment Mode for Tape Interchangeability, connect a Cut Jumper Wire as shown in Fig.M6.
(Auto Tracking is turned off.)
After finishing the adjustment, disconnect the Cut Jumper Wire.

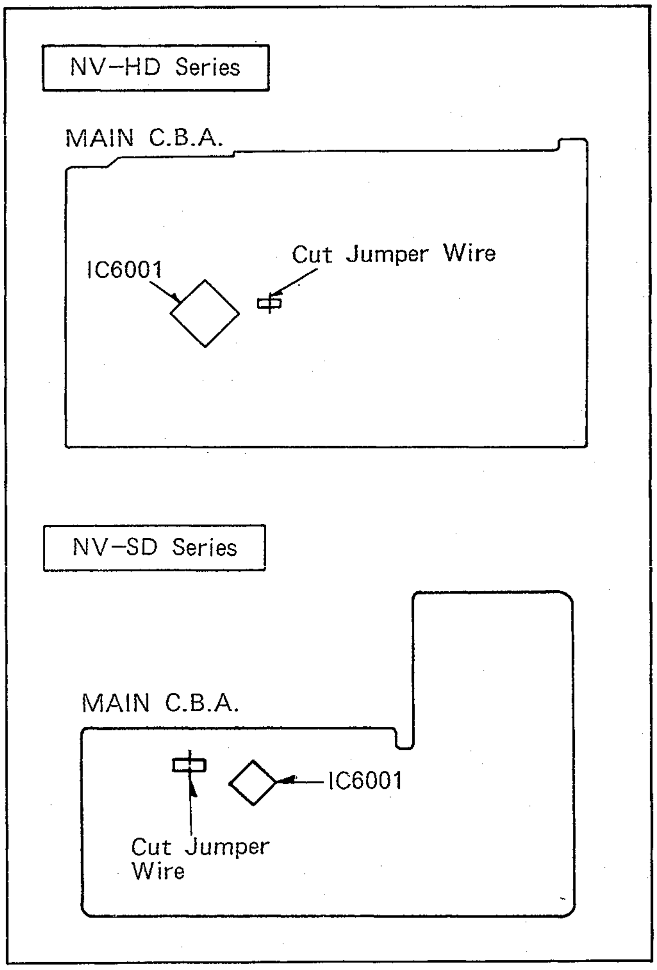

NV–HD Series
MAIN C.B.A.
IC6001
Cut Jumper Wire
NV–SD Series
MAIN C.B.A.
IC6001
Cut Jumper Wire

Fig. M6

(1) Adjustment of P2 and P3 Posts

(Equipment Required)
Alignment Tape(PAL/SECAM: VFJ8125H3F,
NTSC: VFM8080HQFP)
Post Adjustment Screwdriver (VFK0329)

1. Set the tracking control into the fix position. (by pressing the tracking (+) and (−) button simultaneously on the Remote Controller)
   And connect the oscilloscope to the output of the Head Amp as shown in Fig.M7.

Note:
To get a stable waveform of the Head Amp output on the oscilloscope, use the head switching pulse as a triggering signal as shown in Fig.M7.

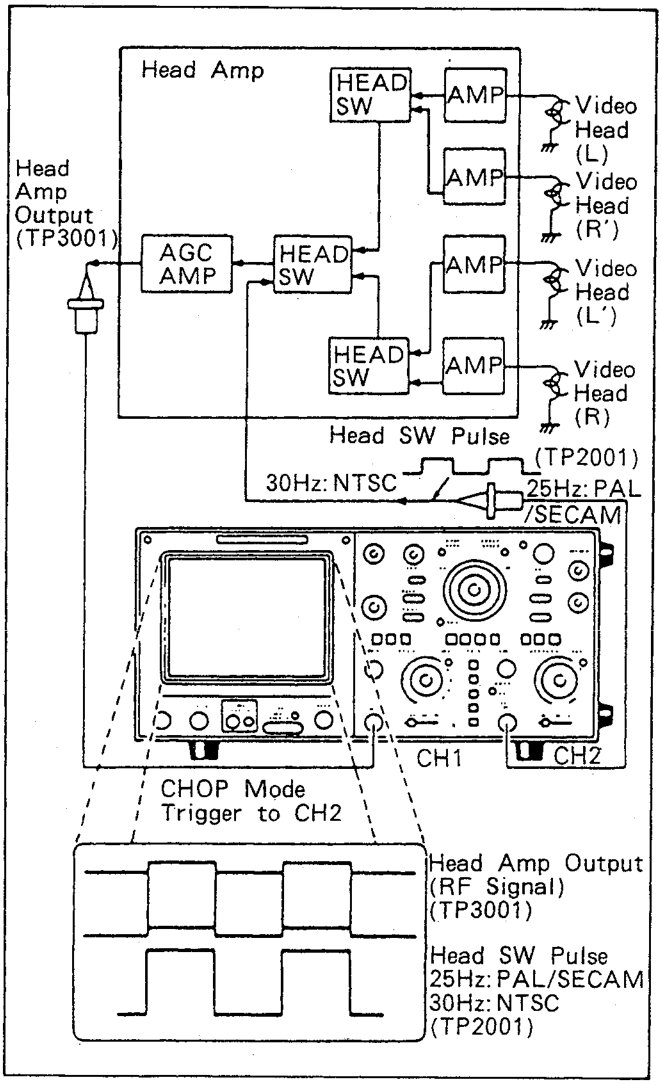

Head Amp
HEAD SW
AMP
Video Head (L)
AMP
Video Head (R')
Head Amp Output (TP3001)
AGC AMP
HEAD SW
AMP
Video Head (L')
HEAD SW
AMP
Video Head (R)
Head SW Pulse
(TP2001)
30Hz: NTSC
25Hz: PAL /SECAM
CH1
CH2
CHOP Mode
Trigger to CH2
Head Amp Output (RF Signal) (TP3001)
Head SW Pulse 25Hz: PAL/SECAM 30Hz: NTSC (TP2001)

Fig. M7 Connect of Oscilloscope

2. Playback the alignment tape.
3. If the RF envelope appears like example "A" or "B" in Fig.M8 then adjustment of the tape guide post (P2: Entrance) is necessary.
4. Adjust the tape guide post (P2) with the post adjustment screwdriver so that the RF envelope waveform at the entrance portion becomes flat as shown in Fig.M8−"C".

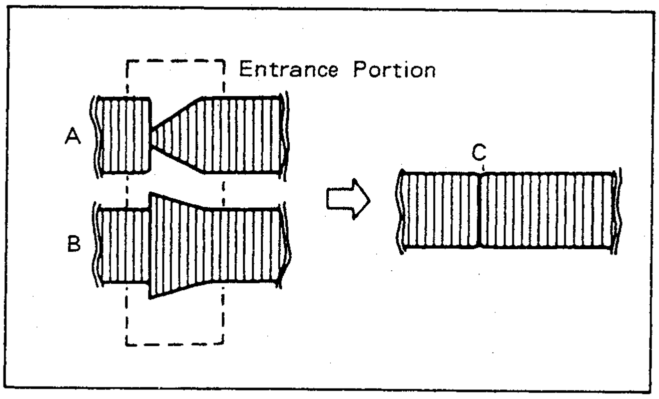

Entrance Portion
A
B
C

Fig. M8

5. If the RF envelope appears like example "D" or "E" in Fig.M9, then adjustment of the tape guide post (P3: Exit) is necessary.
6. Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in Fig.M9−"F".

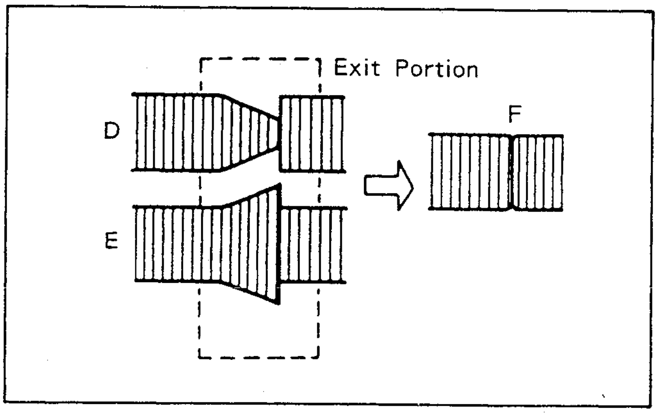

Exit Portion
D
E
F

Fig. M9

7. Turn the Tracking VR fully clockwise and counter clockwise. (Keep pressing + button or − button on the Remote Controller) The output envelope should vary nearly parallel with other condition as shown in Fig.M10.
8. Set the tracking control into centre fix position and adjust for maximum RF envelope, whilst being as flat as possible.

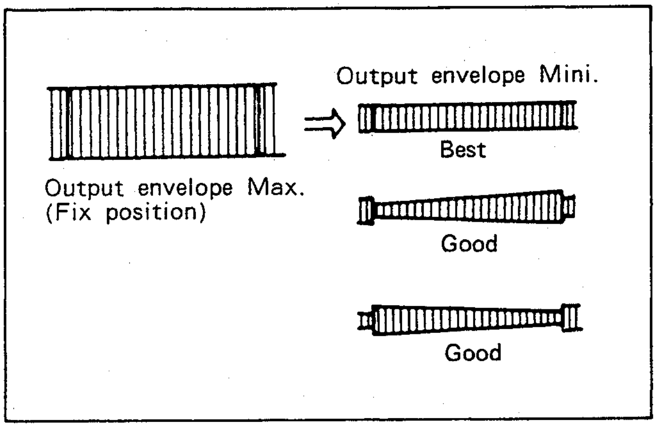

Output envelope Mini.
Best
Good
Good
Output envelope Max.
(Fix position)

Fig. M10

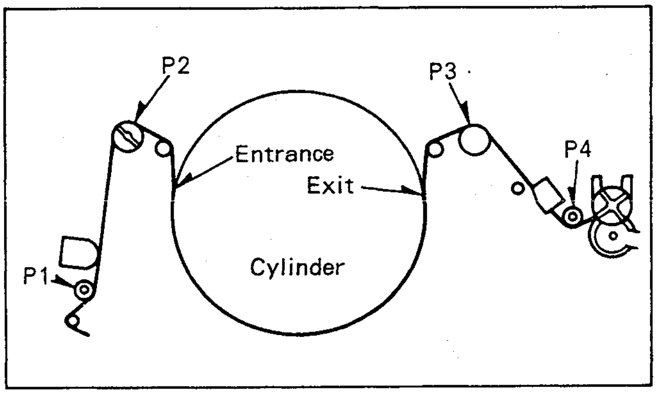

P2
P3
P4
P1
Entrance
Exit
Cylinder

Fig. M11 Loading of Posts

(2) Height Adjustment of A/C Head (1)

1) Install the A/C HEAD on the A/C HEAD BASE(E) by 3 screws (A),(B) and (C) with springs.
2) Tighten the screw (A) unit it touches chassis and then rotate the SCREW (A) counterclockwise for approx. 1.5 times.
3) Rotate the 2 screws(B) and (C) until A/C HEAD BASE(D) and (E) is separate.

CAUTION:
When adjusting the Screws (B) and (C) on the A/C HEAD BASE(E), do not touch the Screw Driver to the face of the A/C HEAD.

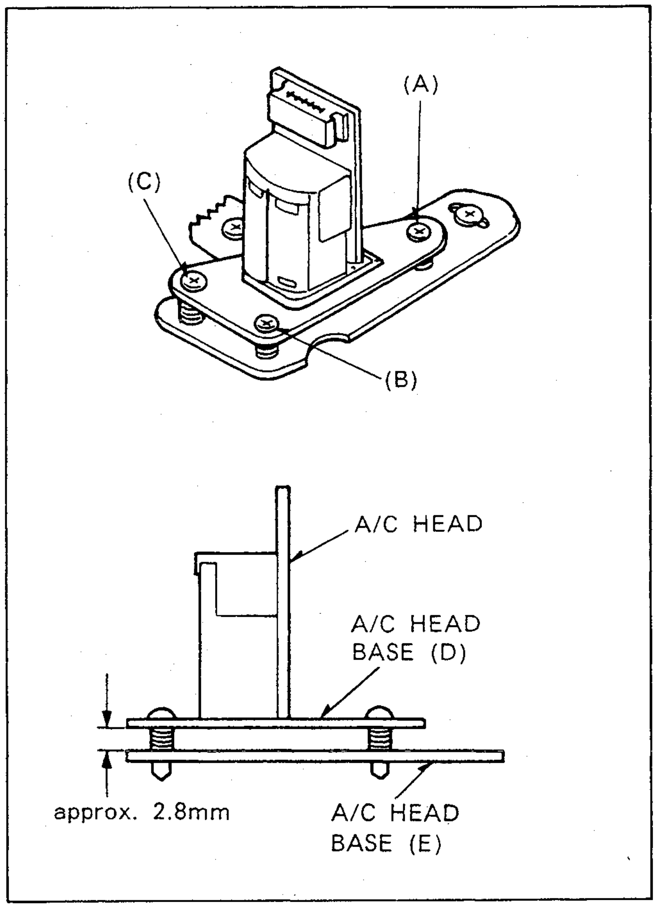
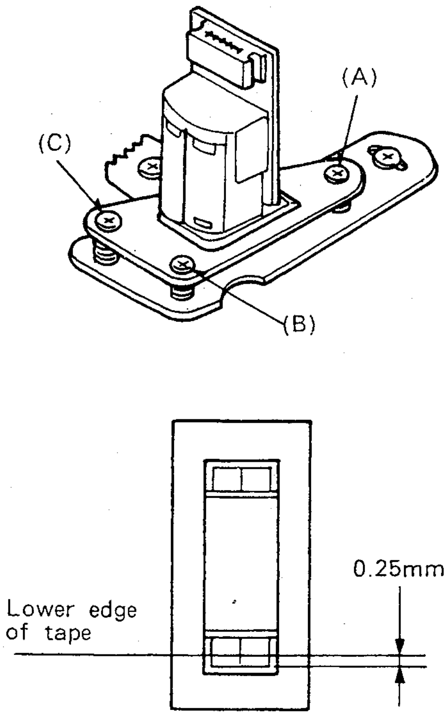

(A)
(C)
(B)
A/C HEAD
A/C HEAD BASE (D)
approx. 2.8mm
A/C HEAD BASE (E)

Fig. M12

(3) Height Adjustment of A/C Head (2)

1) Playback the alignment tape.
2) Rotate the screw (A) or (B) until the wrinkle appears on the lower edge of tape at P4 post.
3) Rotate the screw (A) or (B) until the wrinkle just disappears on the lower edge of tape at P4 post.
4) Connect the oscilloscope to audio output terminal.
5) Rotate the screw (C) until audio signal is maximized.



	SCREW (A)	SCREW (B)
So wrinkle appears on the lower edge of tape	COUNTER CLOCKWISE	CLOCKWISE
So wrinkle disappears on the lower edge of tape	CLOCKWISE	COUNTER CLOCKWISE

Fig. M13

(4) Fine-Adjustment of A/C HEAD

<When moving the A/C HEAD up>

1) Rotate the screw (A) counterclockwise until the wrinkle appears on the lower edge of tape at P4 post.
2) Rotate the screw (B) counterclockwise until the wrinkle just disappears on the lower edge of tape at P4 post.
3) Rotate the screw (C) counterclockwise until the audio signal is maximized.

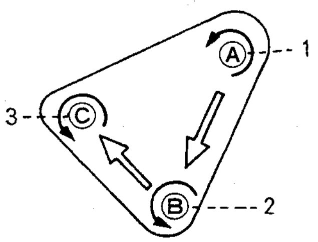


Fig. M14

<When moving the A/C HEAD down>

1) Rotate the screw (B) clockwise until the wrinkle appears on the lower edge of tape a P4 post.
2) Rotate the screw (A) clockwise until the wrinkle just disappears on the lower edge of tape at P4 post.
3) Rotate the screw (C) clockwise until the audio signal is miximized.

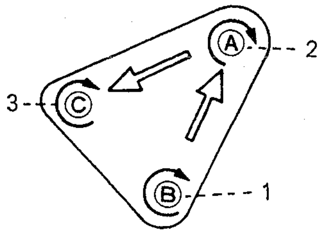


Fig. M15

(5) Horizontal Position Adjustment of A/C HEAD

1) Set the tracking control into the centre fix position. (by pressing the tracking (+) and (−) button simultaneously on the Remote Controller)
2) Connect the oscilloscope to the output of the Head Amp as shown in Fig.M7.
3) Playback the alignment tape.
4) Loosen the 2 screws (F) and (G).
5) Adjust the A/C HEAD BASE (E) until the RF envelope waveform is maximized.

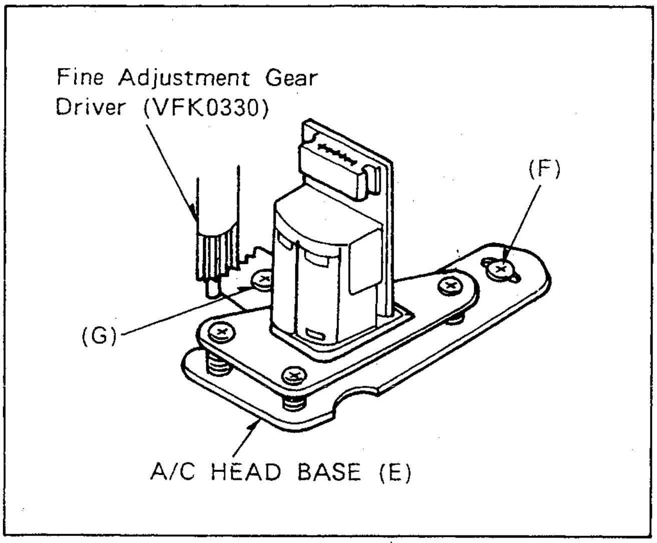

Fine Adjustment Gear Driver (VFK0330)
(F)
(G)
A/C HEAD BASE (E)

Fig. M16

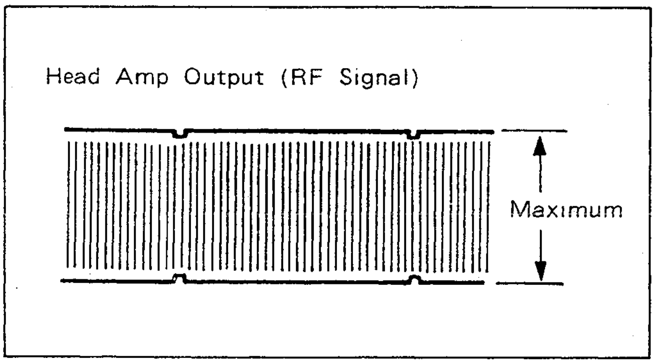
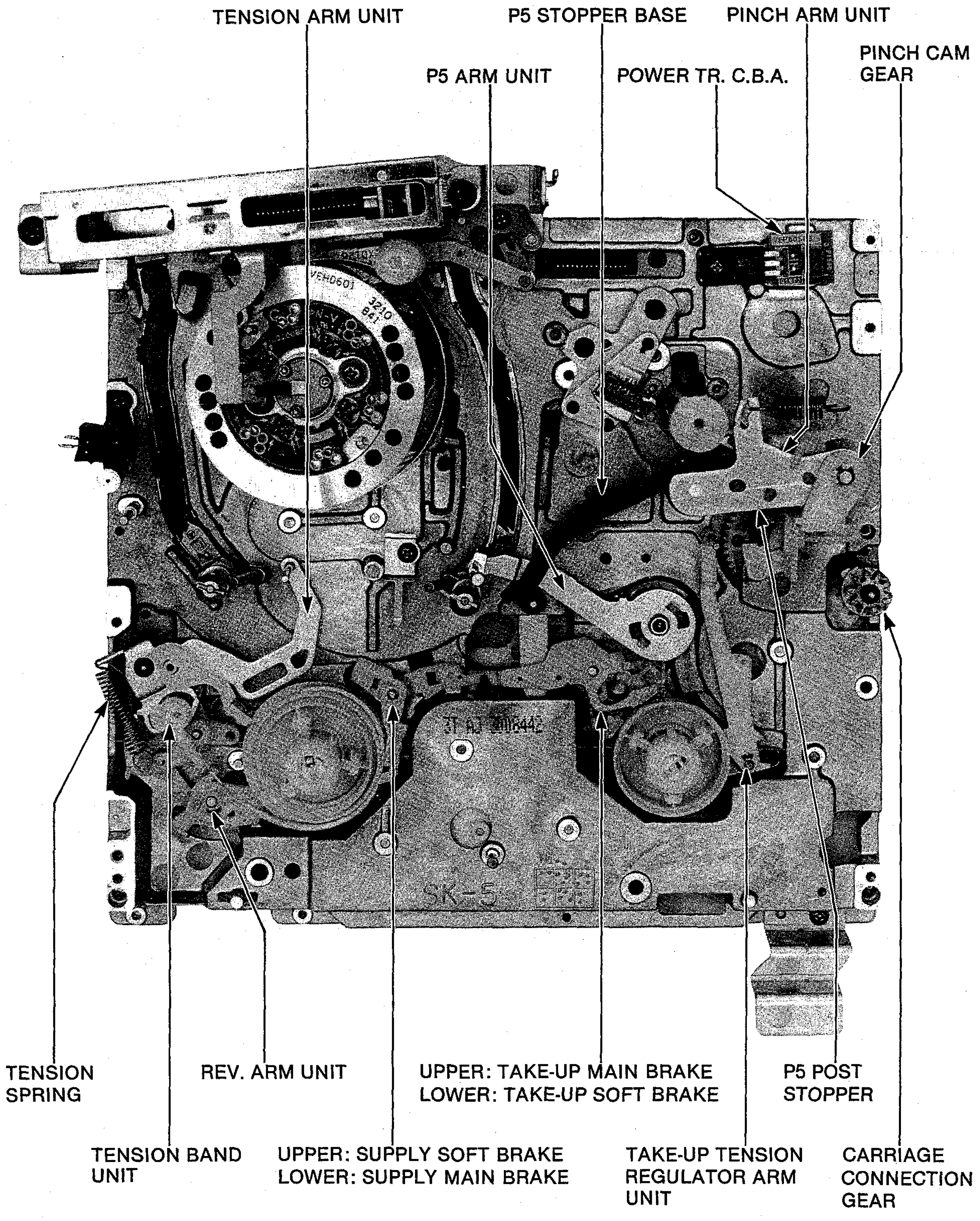


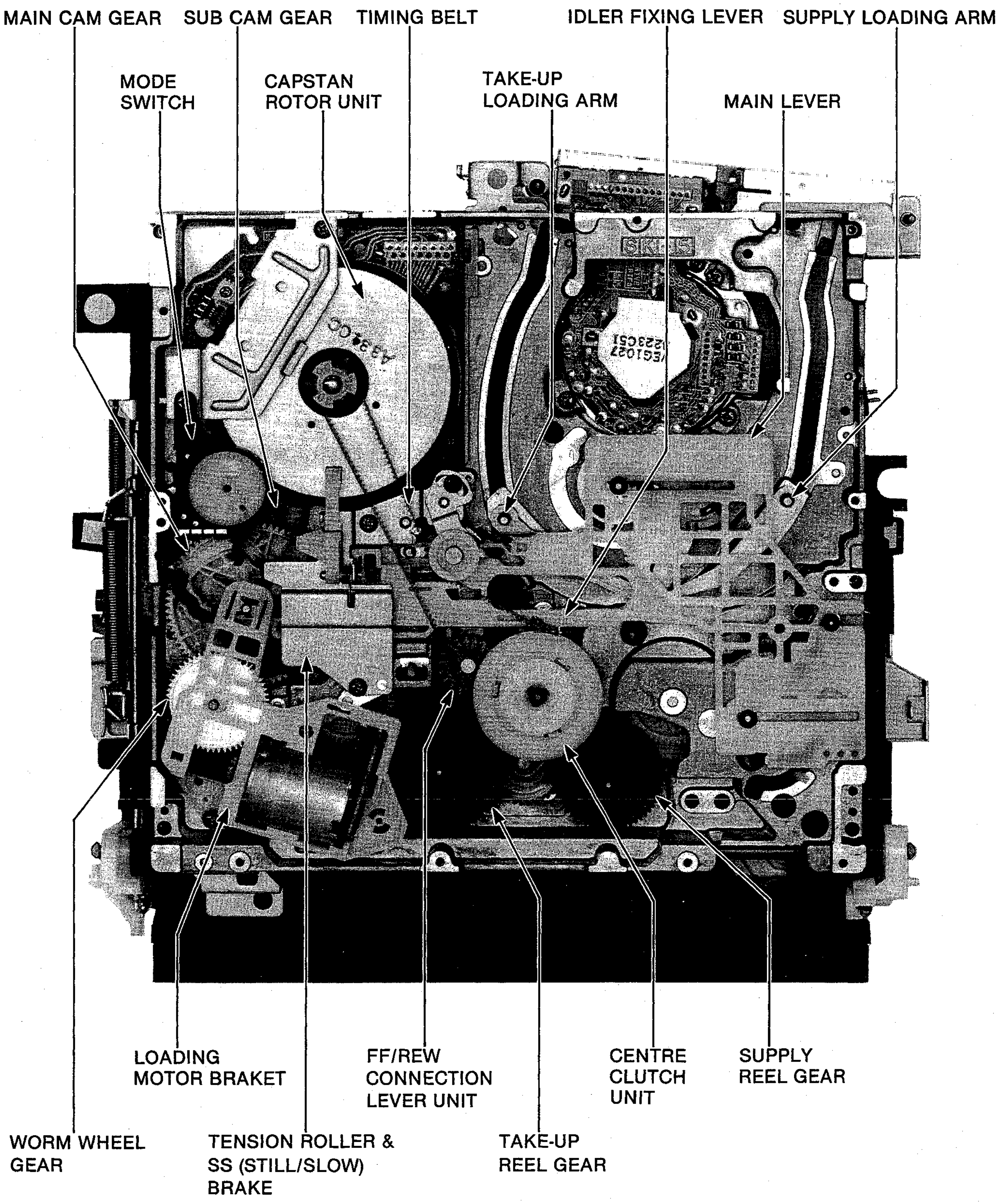
Fig. M17

3. DISASSEMBLY PROCEDURES OF MECHANISM

In order to remove the mechanism components it is first necessary to remove the mechanism chassis.


TENSION ARM UNIT
P5 STOPPER BASE
PINCH ARM UNIT
PINCH CAM GEAR
P5 ARM UNIT
POWER TR. C.B.A.
TENSION SPRING
REV. ARM UNIT
UPPER: TAKE-UP MAIN BRAKE
LOWER: TAKE-UP SOFT BRAKE
P5 POST STOPPER
TENSION BAND UNIT
UPPER: SUPPLY SOFT BRAKE
LOWER: SUPPLY MAIN BRAKE
TAKE-UP TENSION REGULATOR ARM UNIT
CARRIAGE CONNECTION GEAR

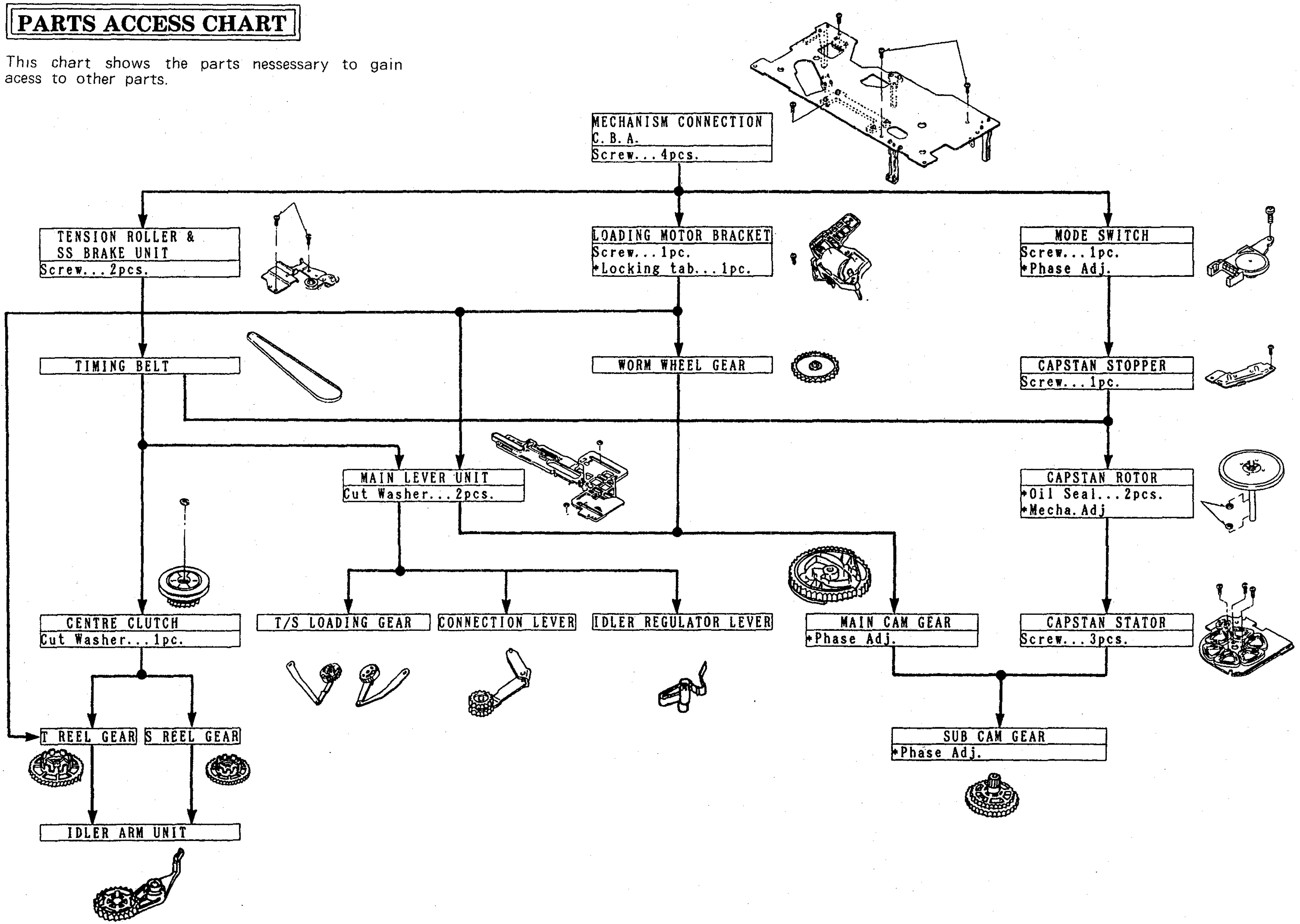
TOP VIEW OF K-MECHANISM


MAIN CAM GEAR
SUB CAM GEAR
TIMING BELT
IDLER FIXING LEVER
SUPPLY LOADING ARM
MODE SWITCH
CAPSTAN ROTOR UNIT
TAKE-UP LOADING ARM
MAIN LEVER
LOADING MOTOR BRAKET
FF/REW CONNECTION LEVER UNIT
CENTRE CLUTCH UNIT
SUPPLY REEL GEAR
WORM WHEEL GEAR
TENSION ROLLER & SS (STILL/SLOW) BRAKE
TAKE-UP REEL GEAR

BOTTOM VIEW OF K-MECHANISM

PARTS ACCESS CHART

This chart shows the parts nessessary to gain acess to other parts.


MECHANISM CONNECTION
C. B. A.
Screw...4pcs.
TENSION ROLLER &
SS BRAKE UNIT
Screw...2pcs.
LOADING MOTOR BRACKET
Screw...1pc.
*Locking tab...1pc.
MODE SWITCH
Screw...1pc.
*Phase Adj.
TIMING BELT
WORM WHEEL GEAR
CAPSTAN STOPPER
Screw...1pc.
MAIN LEVER UNIT
Cut Washer...2pcs.
CAPSTAN ROTOR
*Oil Seal...2pcs.
*Mecha. Adj
CENTRE CLUTCH
Cut Washer...1pc.
T/S LOADING GEAR
CONNECTION LEVER
IDLER REGULATOR LEVER
MAIN CAM GEAR
*Phase Adj.
CAPSTAN STATOR
Screw...3pcs.
T REEL GEAR
S REEL GEAR
SUB CAM GEAR
*Phase Adj.
IDLER ARM UNIT

3-1. REMOVAL OF THE MECHANISM CHASSIS

1) Remove the 2 screws(A) push the HOLDER PLATE slightly to the rear of mechanism.
2) Remove the screw(B).
3) Disconnect all cables and connectors on the mechanism chassis and connector P6003 on the MAIN C.B.A.(connecting to DEW SENSOR). (Use extreme care when disconnecting the P1508)
4) Lift the mechanism chassis out of the unit.

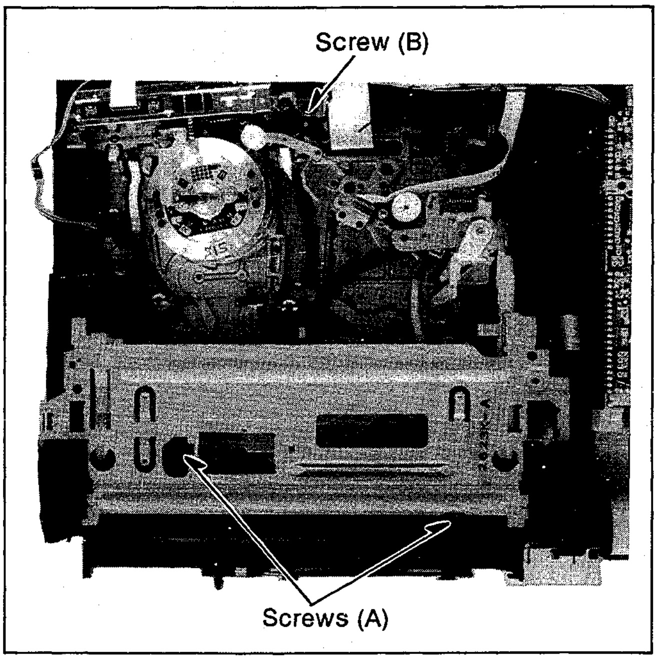

Screw (B)
Screws (A)

Fig. A1

3-2. REMOVAL OF THE MECHANISM CONNECTION C.B.A.

1) Remove the 4 screws(C).
2) Lift up on the C.B.A.

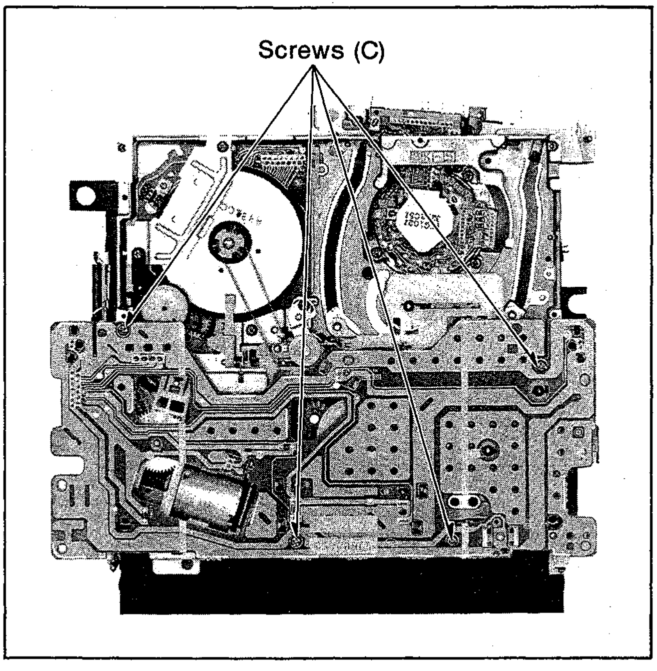


Fig. A2

3-3. REMOVAL OF THE TENSION ROLLER AND SS BRAKE

1) Remove the 2 screws(D).
2) Remove the TENSION ROLLER and the SS BRAKE.

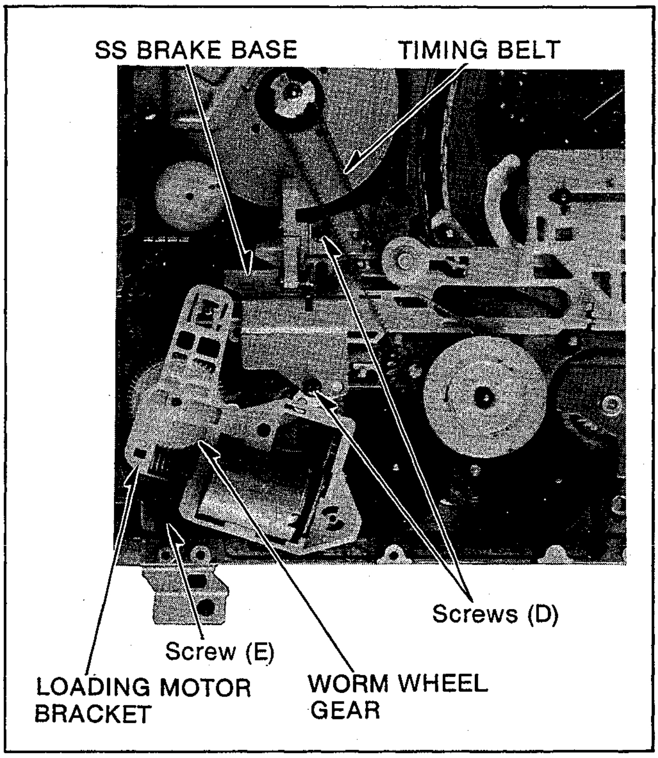

SS BRAKE BASE
TIMING BELT
Screws (D)
Screw (E)
LOADING MOTOR BRACKET
WORM WHEEL GEAR

Fig. A3

3-4. REMOVAL OF THE TIMING BELT

1) Remove the TIMING BELT.

3-5. REMOVAL OF THE LOADING MOTOR BRACKET

1) Remove the screw(E) as shown in Fig.A3.
2) Disconnect the locking tab on the right by pushing the locking tab in as shown in Fig.A4.
3) Lift up on the LOADING MOTOR BRACKET and push the BRACKET towards the MAIN CAM GEAR as shown in Fig.A3.
4) Lift the WORM WHEEL GEAR off the shaft.

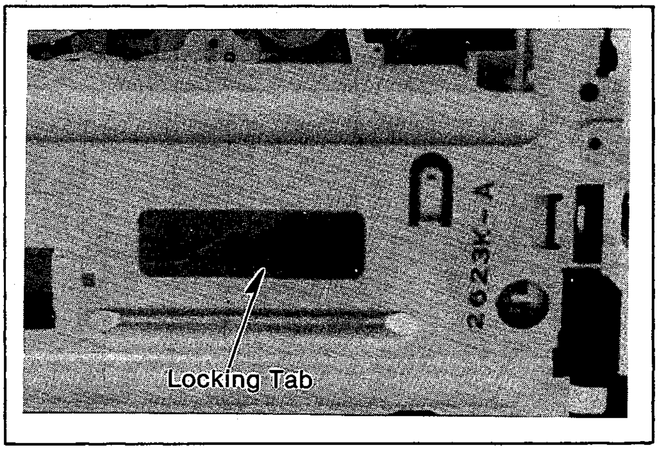

Locking Tab
2623K-A

Fig. A4

3–6. REMOVAL OF THE MAIN LEVER UNIT

1) Remove the 3 cut washers.
2) Remove the MAIN LEVER UNIT.

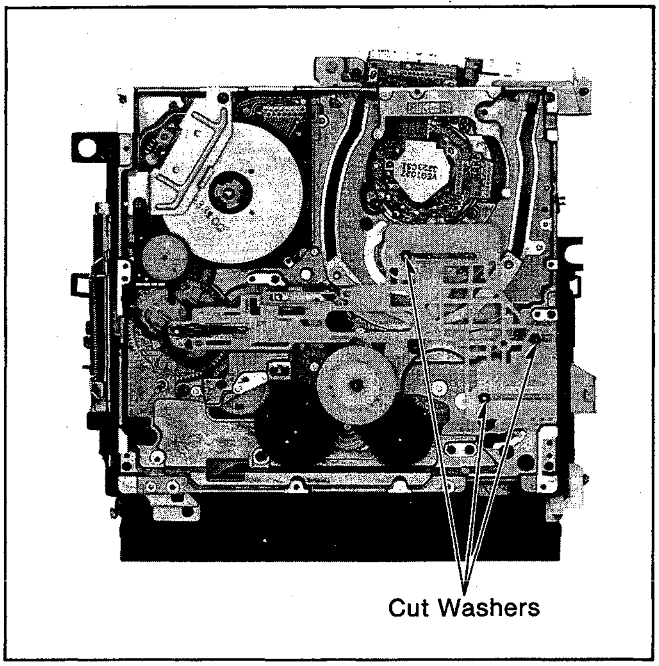

Cut Washers

Fig. A5

3–7. REMOVAL OF THE TAKE–UP AND SUPPLY LOADING ARMS

1) Remove the TAKE–UP and SUPPLY LOADING GEARs by lifting them up off the post.

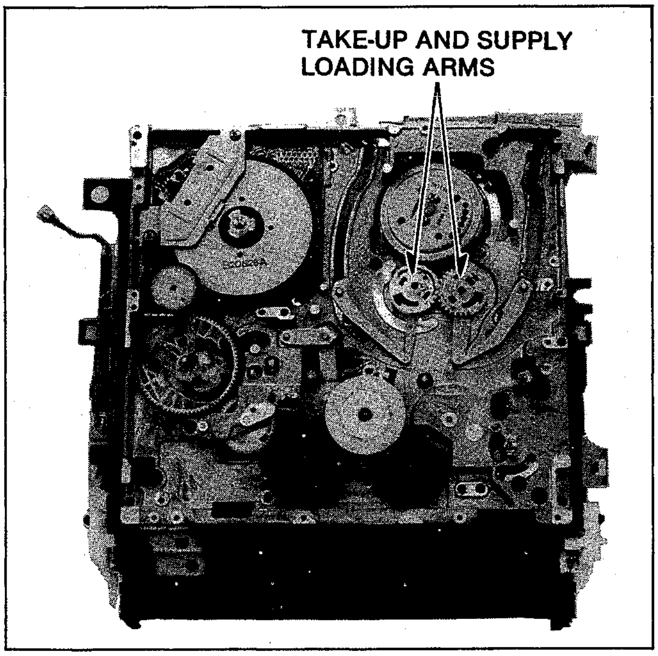

TAKE-UP AND SUPPLY
LOADING ARMS

Fig. A6

3–8. REMOVAL OF THE MODE SWITCH

1) Remove screw(F).
2) Remove the MODE SWITCH.

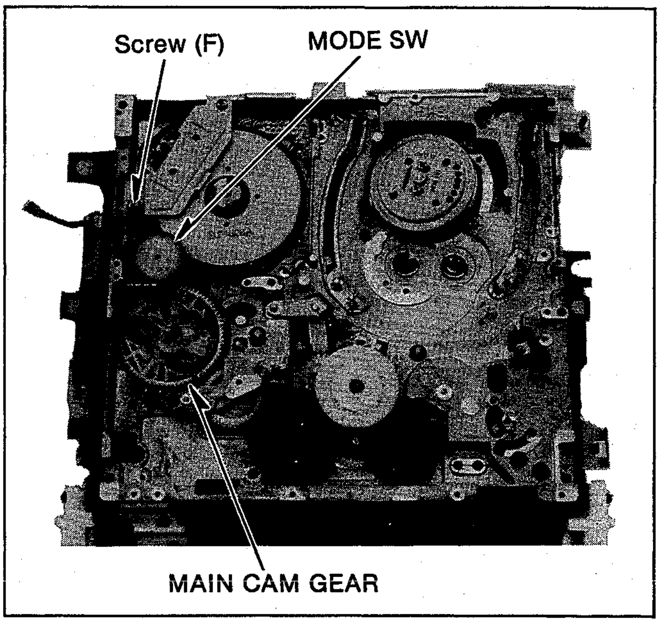

Screw (F)
MODE SW
MAIN CAM GEAR

Fig. A7

3–9. REMOVAL OF THE MAIN CAM GEAR

1) Lift the MAIN CAM GEAR off the shaft.

3–10. REMOVAL OF THE CAPSTAN ROTOR UNIT

1) Remove the screw(G) and remove the CAPSTAN STOPPER as shown in Fig.A8.

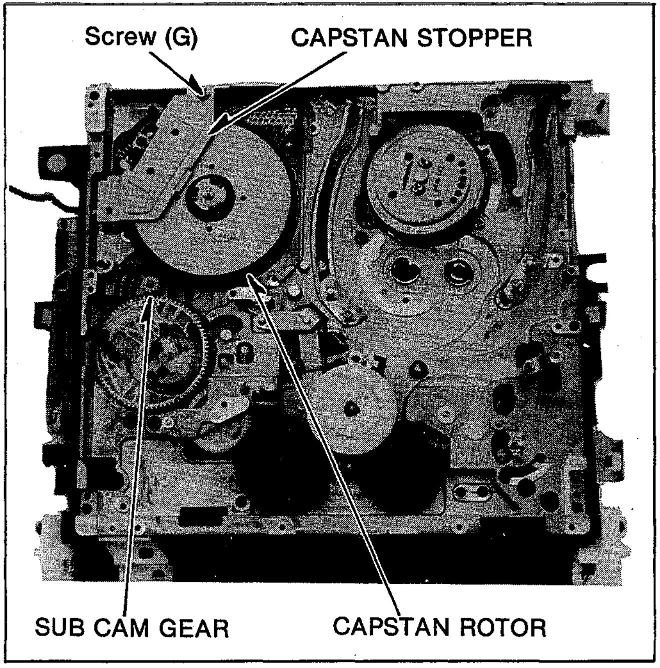

Screw (G)
CAPSTAN STOPPER
SUB CAM GEAR
CAPSTAN ROTOR

Fig. A8

2) Pull out the CAPSTAN ROTOR.
(When the CAPSTAN ROTOR is removed, 2 OIL SEALs are left in the CAPSTAN ROTOR HOUSING Fig.A9.. To avoid losing the OIL SEALs, place them back on the CAPSTAN SHAFT.)

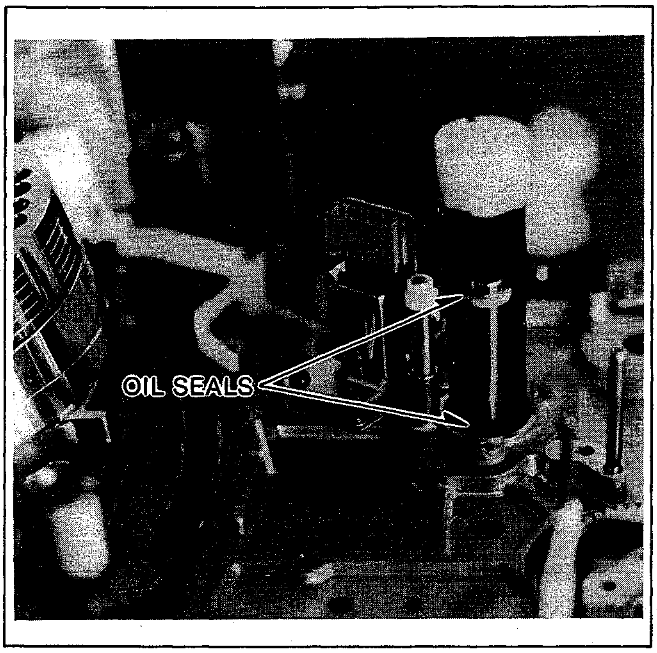


Fig. A9

3) Remove the 3 screws(H) and remove the CAPSTAN STATOR as shown in Fig.A10.

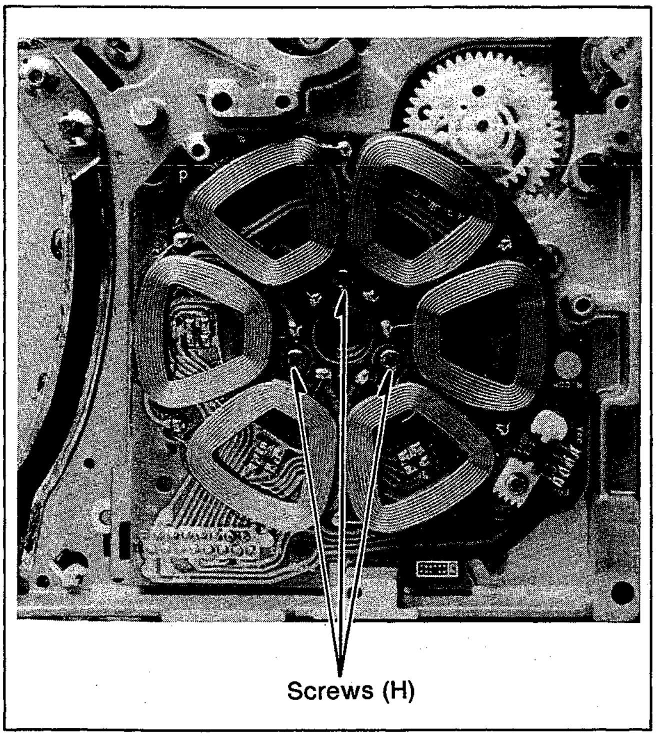


Fig. A10

3–11. REMOVAL OF THE SUB CAM GEAR

1) Lift the SUB CAM GEAR off the shaft.

3–12. REMOVAL OF THE CENTRE CLUTCH

1) Remove the cut washer.
2) Remove the CENTRE CLUTCH.

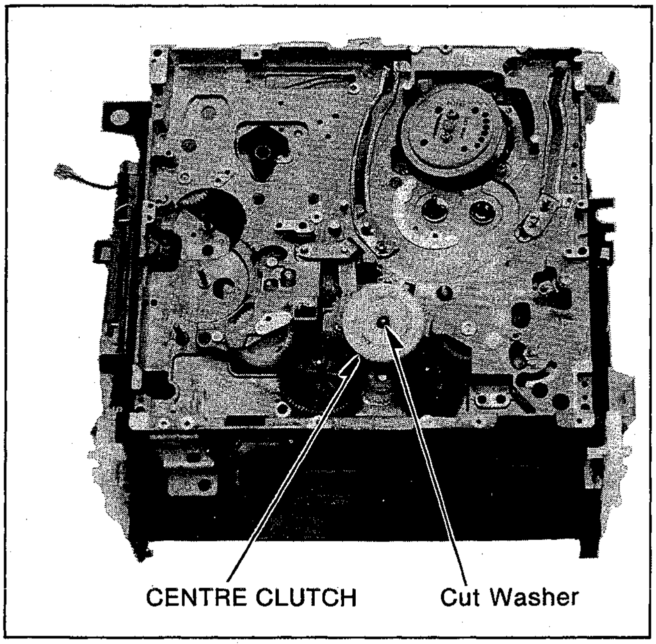

CENTRE CLUTCH
Cut Washer

Fig. A11

3–13. REMOVAL OF THE TAKE–UP AND SUPPLY REEL GEARS

1) Unlock the locking tab and lift up on the reel.

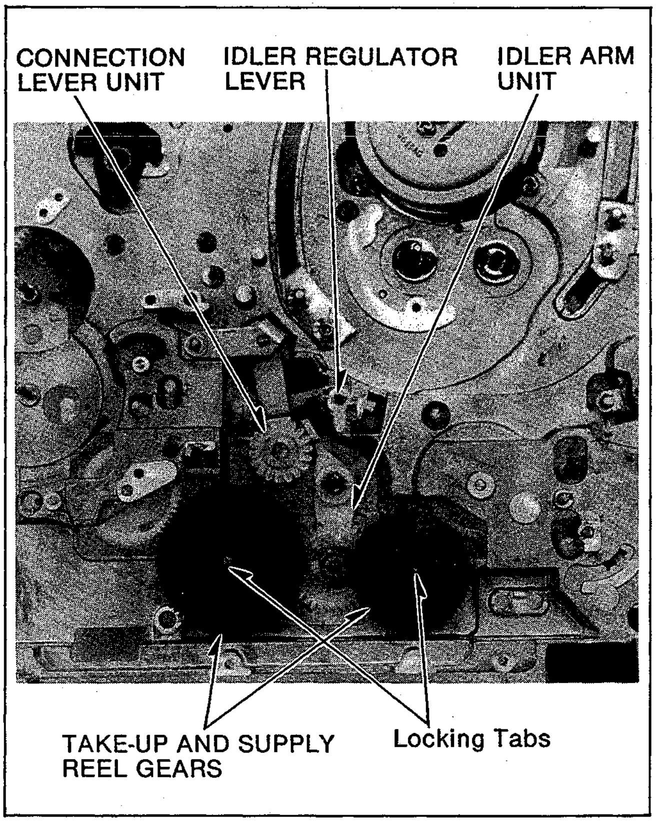

CONNECTION LEVER UNIT
IDLER REGULATOR LEVER
IDLER ARM UNIT
TAKE-UP AND SUPPLY REEL GEARS
Locking Tabs

Fig. A12

3–14. REMOVAL OF THE IDLER ARM UNIT, CONNECTION LEVER UNIT AND IDLER REGULATOR LEVER

1) Lift the IDLER ARM UNIT and CONNECTION LEVER UNIT off the shaft.
2) Remove the IDLER REGULATOR LEVER.

3–15. REMOVAL OF THE TOP PLATE

1) Push the locking tabs from the outer side to inside as shown in Fig.A13.
2) Lift up on the TOP PLATE.

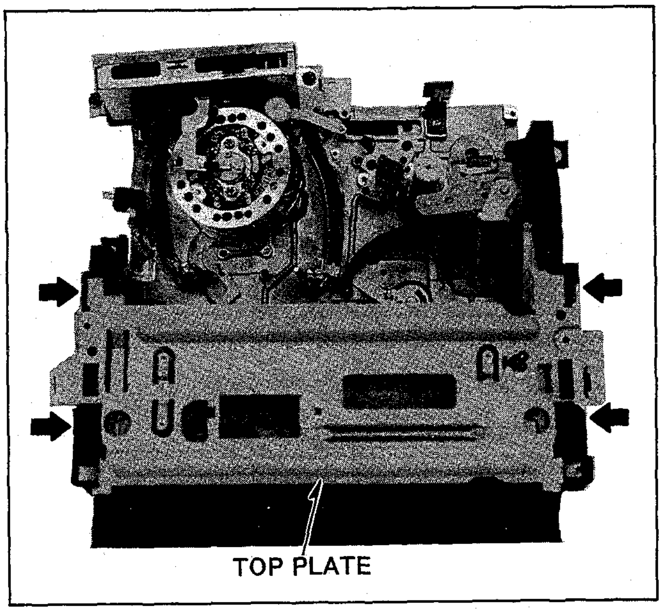


Fig. A13

NOTE:
If locking tab is broken, TOP PLATE can be installed by screws(XTB26+8G) as shown in Fig.A14.

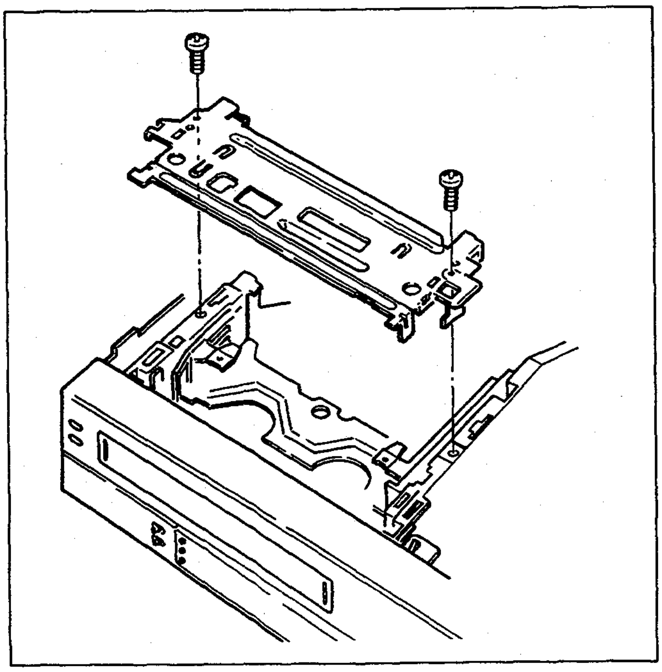


Fig. A14

3–16. REMOVAL OF THE CASSETTE HOLDER

1) Slide the HOLDER PLATE in the rear and lift up.
2) Remove the 4 screws(I).
3) Remove the CASSETTE HOLDER.

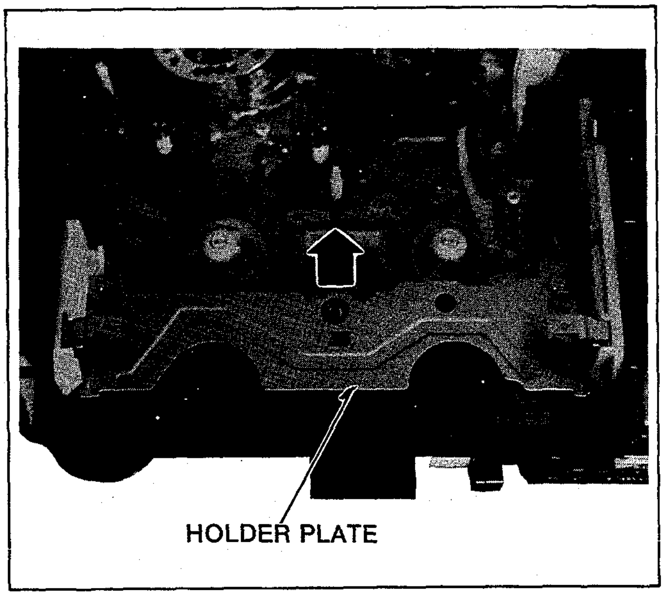


Fig. A15

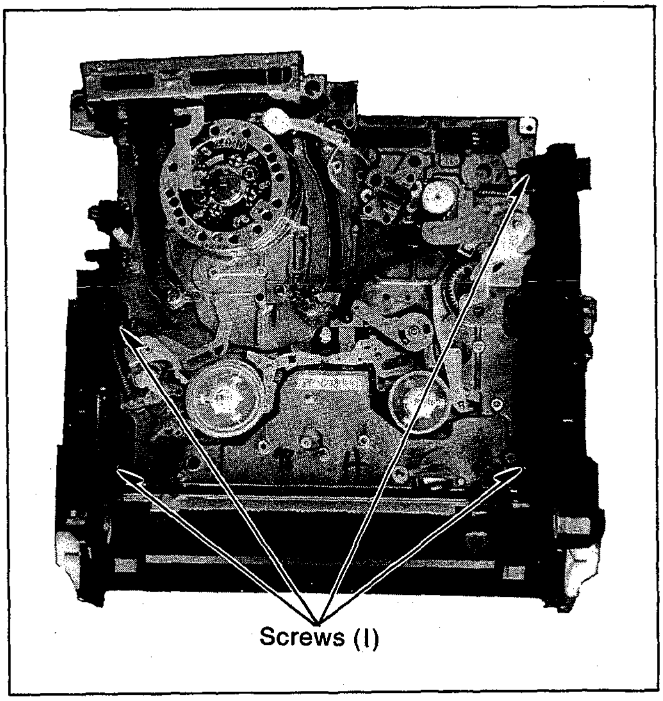


Fig. A16

3-17. REMOVAL OF THE PINCH ARM UNIT

1) Unlock the locking tab on the OPENER PIECE and remove it from the shaft.
2) Remove the PINCH ARM UNIT from the shaft.

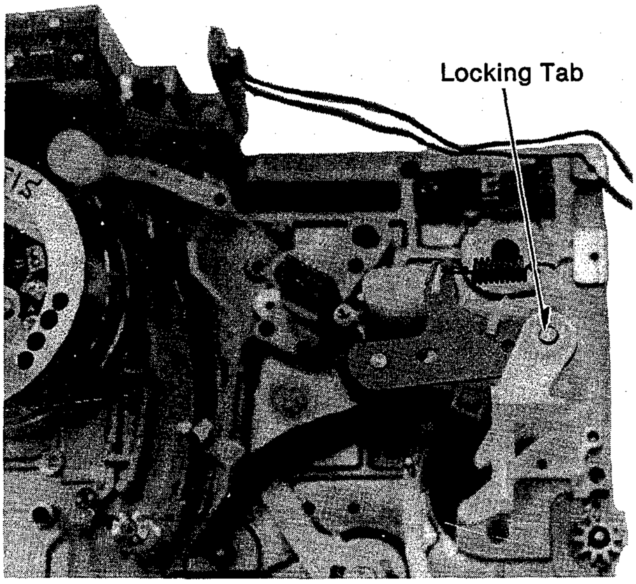

Locking Tab

Fig. A17

3-18. REMOVAL OF THE PINCH CAM GEAR AND P5 ARM UNIT

1) Unlock the locking tab of the P5 STOPPER and remove the P5 STOPPER.
2) Remove the screw(J) and the cut washer.
3) Remove the P5 STOPPER BASE.
4) Remove the PINCH CAM GEAR and P5 ARM UNIT.

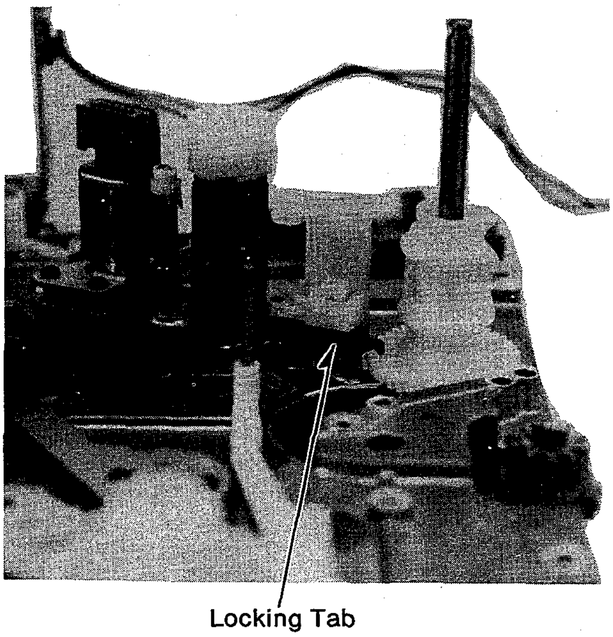

Locking Tab

Fig. A18

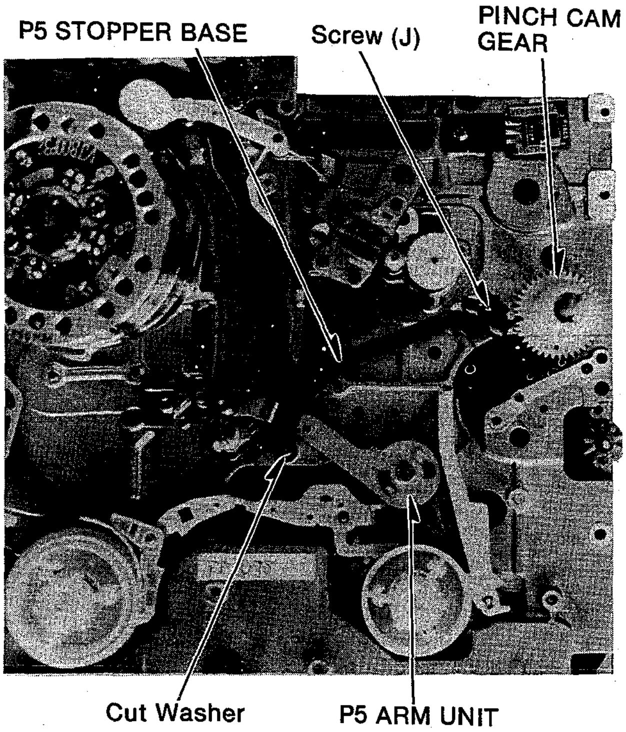

P5 STOPPER BASE
Screw (J)
PINCH CAM GEAR
Cut Washer
P5 ARM UNIT

Fig. A19

3-19. REMOVAL OF THE TAKE-UP TENSION REGULATOR ARM UNIT

1) Disconnect the spring from the bottom of the chassis.
2) Unlock the locking tab and lift the TAKE-UP TENSION REGULATOR ARM UNIT off the shaft.

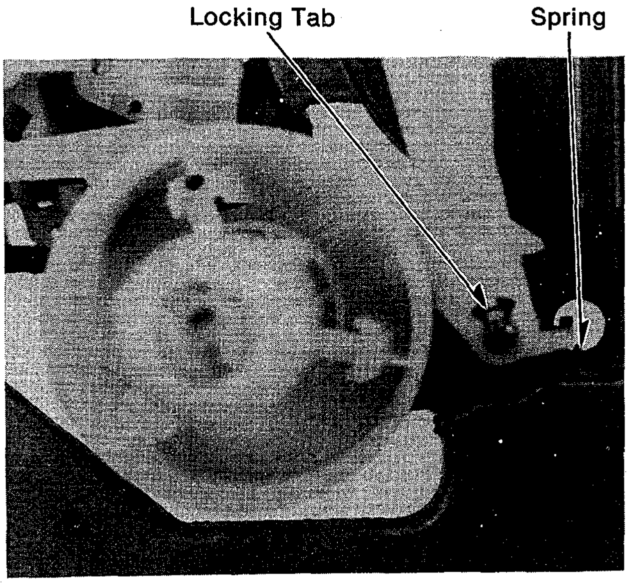

Locking Tab
Spring

Fig. A20

3–20. REMOVAL OF THE CARRIAGE CONNECTION GEAR

1) Remove the cut washer.
2) Lift the CARRIAGE CONNECTION GEAR off the shaft.

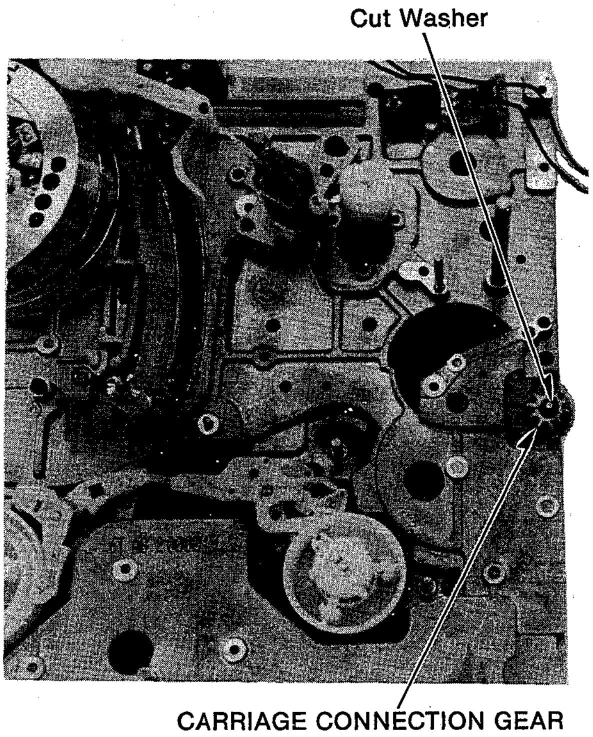

Cut Washer
CARRIAGE CONNECTION GEAR

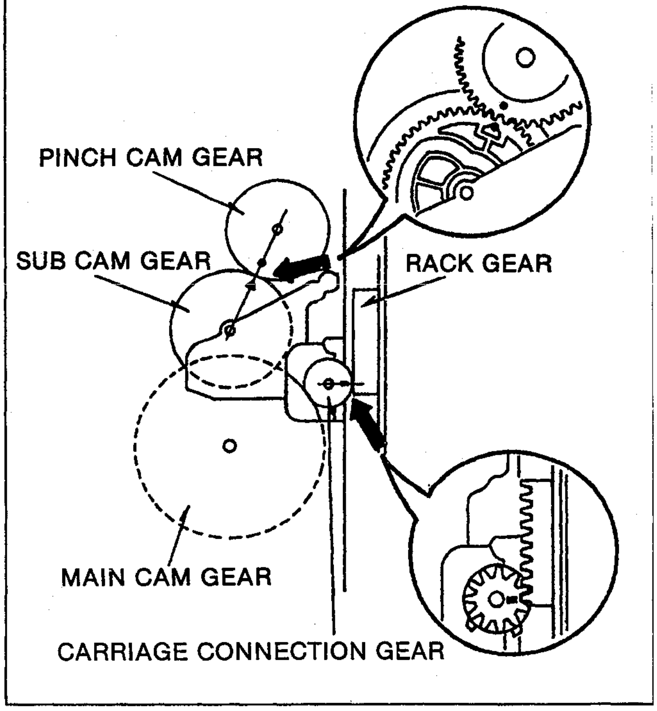
Fig. A21

4. ASSEMBLY PROCEDURES OF MECHANISM

4–1. VIEW OF PHASE ALIGNMENT

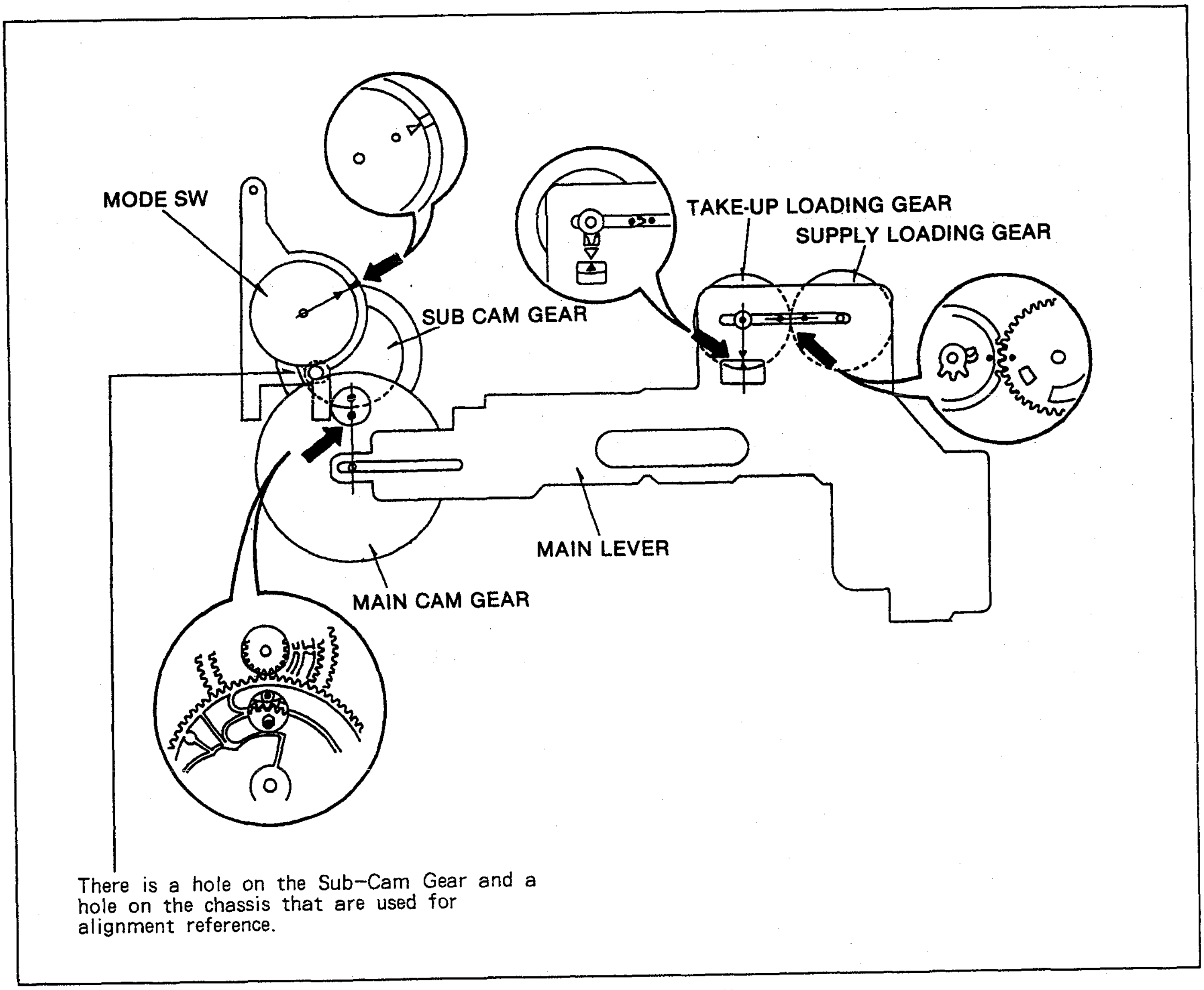
The gear phase alignment is performed in the cassette down position and is crucial for the K–Mechanism to operate correctly.

1) Top View of Gear Phase Alignment Marks.
   There are alignment marks on the Pinch Cam Gear and Sub Cam Gear. There is one alignment mark on the carriage connection gear.


PINCH CAM GEAR
SUB CAM GEAR
RACK GEAR
MAIN CAM GEAR
CARRIAGE CONNECTION GEAR

Top View of Gear Phase Alignment

2) Bottom View of Gear Phase Alignment Marks. There are alignment marks on Take–up Loading Gear and Supply Loading Gear. There is an additional mark on the Take–up Loading Gear that aligns with the mark on the main lever. There are alignment marks on the Main Cam Gear and the Sub Cam Gear. The mode switch gear mark aligns with a notch in the mode switch frame.


MODE SW
TAKE-UP LOADING GEAR
SUPPLY LOADING GEAR
SUB CAM GEAR
MAIN LEVER
MAIN CAM GEAR

There is a hole on the Sub–Cam Gear and a hole on the chassis that are used for alignment reference.

Bottom View of Gear Phase Alignment

4–2. ASSEMBLY OF THE CARRIAGE CONNECTION

1) Install the CARRIAGE CONNECTION GEAR as shown in Fig.A21.
2) Install the cut washer.

4–3. ASSEMBLY OF THE TAKE–UP TENSION REGULATOR ARM UNIT, P5 ARM UNIT PINCH CAM GEAR, P5 STOPPER BASE, P5 STOPPER, PINCH CAM UNIT AND OPENER PIECE

1) Install the TAKE–UP TENSION REGULATOR ARM UNIT.
2) Hook the spring to hole on the chassis.
3) Install the P5 ARM UNIT and PINCH CAM GEAR.
4) Install the P5 STOPPER BASE with cut washer and screw(J).
5) Install the P5 STOPPER, PINCH ARM UNIT and OPENER PIECE.

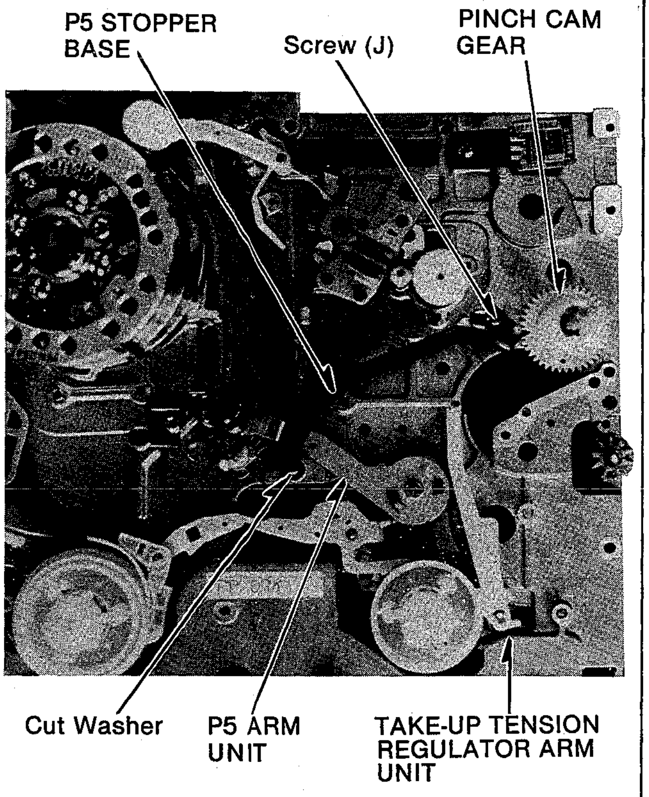

P5 STOPPER BASE
Screw (J)
PINCH CAM GEAR
Cut Washer
P5 ARM UNIT
TAKE-UP TENSION REGULATOR ARM UNIT

Fig. K1

4–4. ASSEMBLY OF THE IDLER ARM UNIT, TAKE–UP AND SUPPLY REEL GEARS, IDLER REGULATOR LEVER,CONNECTION LEVER UNIT AND CENTRE CLUTCH

1) Install the IDLER UNIT, TAKE–UP and SUPPLY REEL GEARs, IDLER REGULATOR LEVER and CONNECTION LEVER UNIT.
2) Install the CENTRE CLUTCH with cut washer.

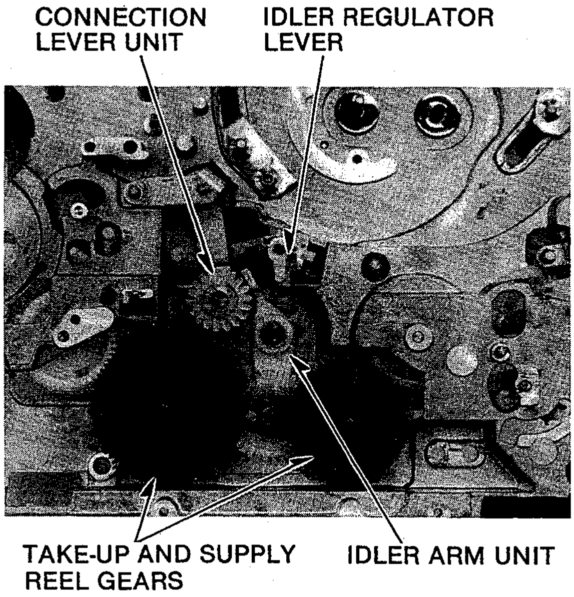

CONNECTION LEVER UNIT
IDLER REGULATOR LEVER
TAKE-UP AND SUPPLY REEL GEARS
IDLER ARM UNIT

Fig. K2

4–5. ASSEMBLY OF THE SUB CAM GEAR

The SUB CAM GEAR is used for the reference of the phase.

1) Install the SUB CAM GEAR so that the chassis hole aligns with hole in the SUB CAM GEAR. Also, the hole in the outer gear of the SUB CAM GEAR must align with the hole in the PINCH CAM GEAR. The boss on the PINCH ARM must be installed in the cam groove of the SUB–CAM GEAR. This is used for the reference of the phase. To aid installation of the SUB–CAM GEAR insert a fixing pin into the holes of the SUB–CAM GEAR and the chassis.

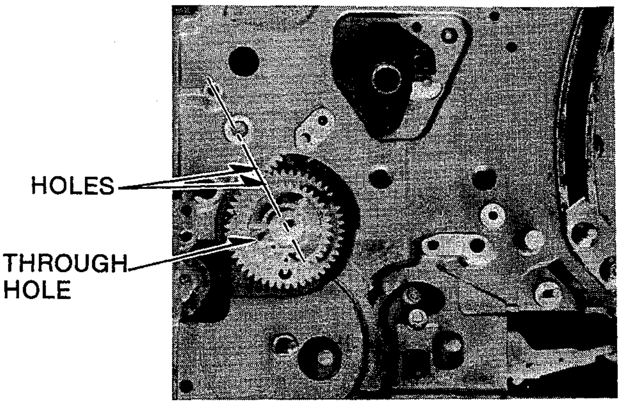

HOLES
THROUGH HOLE

Fig. K3

4–6. ASSEMBLY OF THE STATOR UNIT

1) Place the STATOR UNIT into position. Loosely reinstall the 3 screws that secure the STATOR and HOUSING UNIT. Next insert the CENTERING PIN then tighten the 3 screws as shown in Fig.K4.

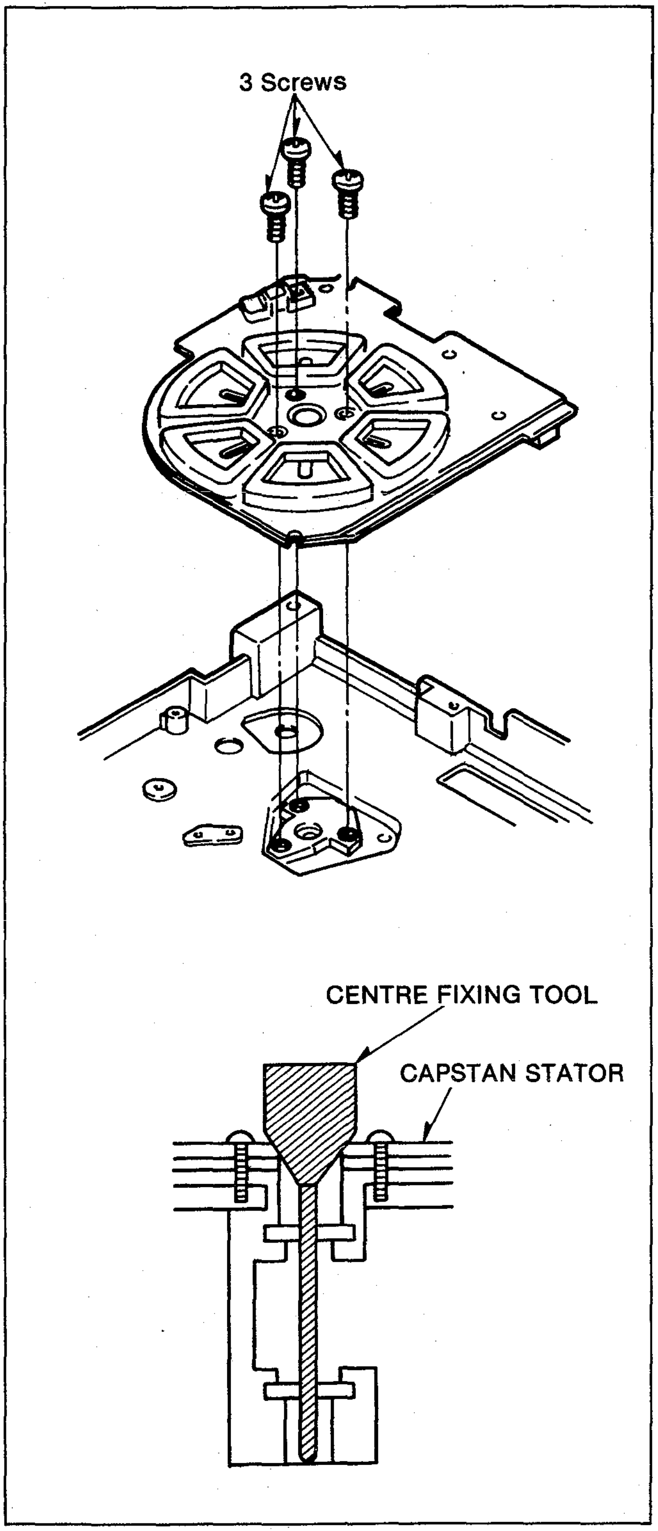


Fig. K4

2) Remove the oil seal from the ROTOR SHAFT Partially install the ROTOR SHAFT into the lower position and install the oil seal. Insert the ROTOR SHAFT further into the housing and install the second OIL SEAL in the upper position. Push the lower OIL SEAL down the ROTOR SHAFT into the housing.

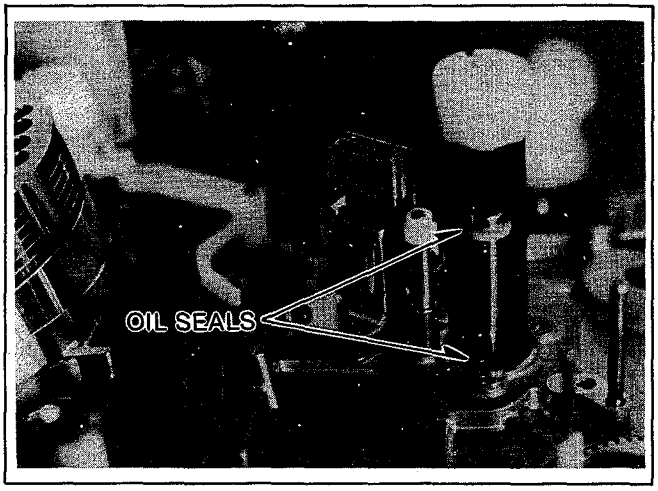


Fig. K5

3) Clean the ROTOR SHAFT after replacement. Reinstall the ROTOR STOPPER and the screw on the top side.

4–7. ASSEMBLY OF THE MAIN CAM GEAR

NOTE:
Before installing the MAIN CAM GEAR, set the CONNECTION GEAR so that the side of the gear with no teeth is towards the MAIN CAM GEAR.

1) Install the MAIN CAM GEAR so that the hole marker aligns with the SUB–CAM GEAR and insert the boss of the TAKE–UP TENSION REGULATOR ARM into the slot on the bottom of the MAIN CAM GEAR.

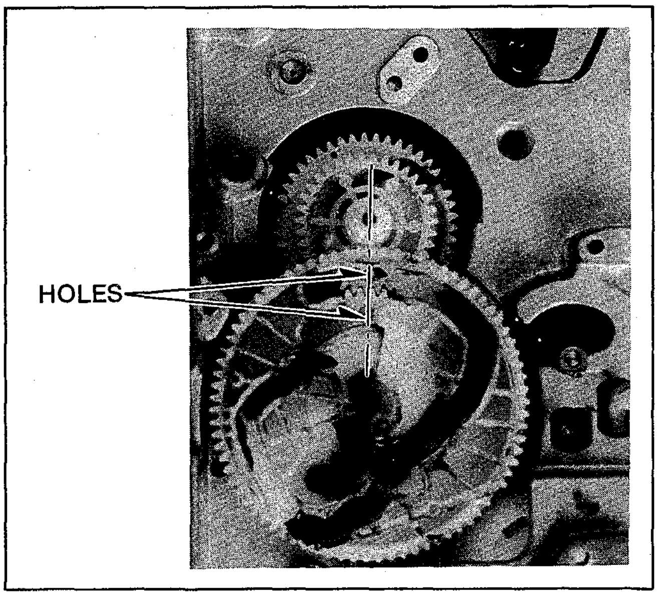


Fig. K6

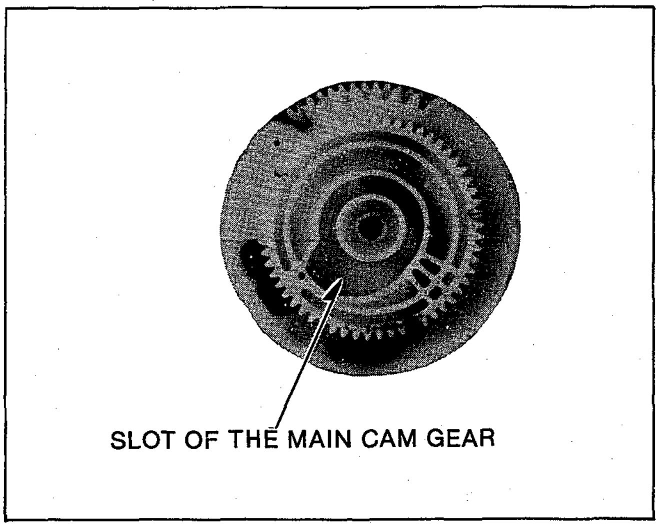


Fig. K7

4–8. ASSEMBLY OF THE MODE SW

1) Align the mark on the MODE SWITCH GEAR with the notch on the MODE SWITCH FRAME.
2) Install the MODE SWITCH taking care that all the phase alignments are correct. Check the CAM GEAR timing by rotating the MAIN CAM GEAR.
3) Install the screw(K) the retains the MODE SWITCH and ROTOR STOPPER.

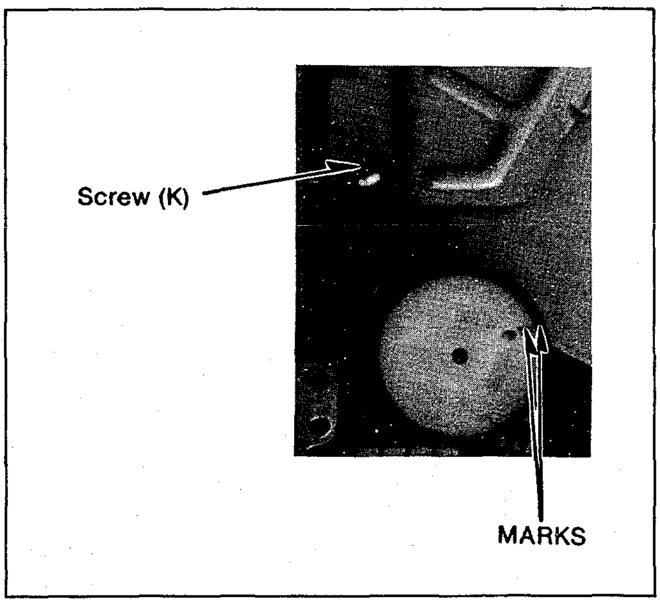


Fig. K8

4–9. ASSEMBLY OF THE T & S LOADING ARMS

1) Set the shaft holders to the unloaded position. Take care that the P5 POST does not interfere with the P3 Post or prevent it from going to the unloaded position. The TENSION ARM must be set to the position that will allow the P2 POST to move back to the unloaded position.

2) Install the TAKE–UP LOADING ARM and SUPPLY LOADING ARM, aligning the marks on the both GEARS.

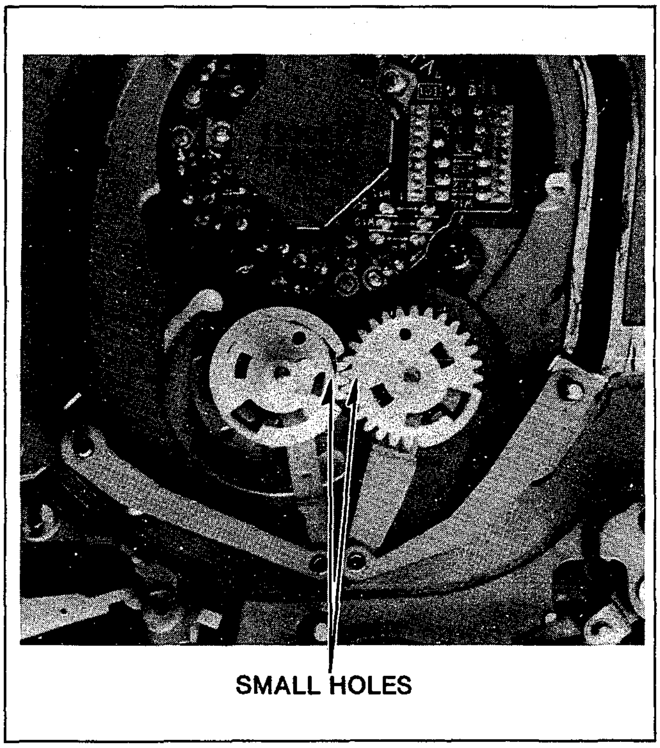


Fig. K9

4-10. ASSEMBLY OF THE MAIN LEVER

1) Install the MAIN LEVER ARM checking that the boss arms and shafts are in the correct position and the mark on the MAIN LEVER ARM is aligned with mark on the TAKE-UP LOADING GEAR.

2) Install the 3 cut washers.

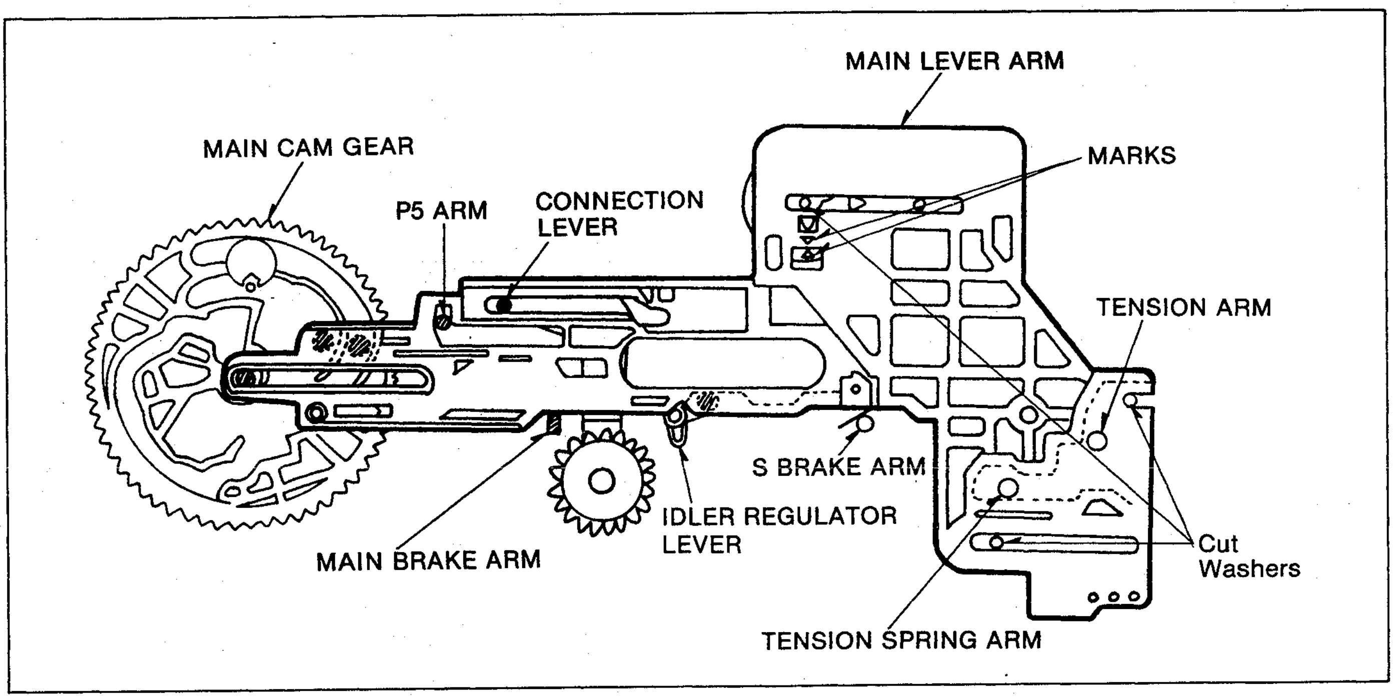

MAIN LEVER ARM
MAIN CAM GEAR
MARKS
P5 ARM
CONNECTION LEVER
TENSION ARM
S BRAKE ARM
IDLER REGULATOR LEVER
MAIN BRAKE ARM
Cut Washers
TENSION SPRING ARM

Fig. K10

4-11. ASSEMBLY OF THE WORM WHEEL GEAR & LOADING MOTOR BRACKET

1) Reinstall the WORM WHEEL GEAR.

2) Install the LOADING MOTOR BRACKET. First set the BRACKET over the MAIN CAM GEAR shaft and slide until it locks. Then push down on the BRACKET until the locking tab is connected to the chassis. Reinstall the screw(L).

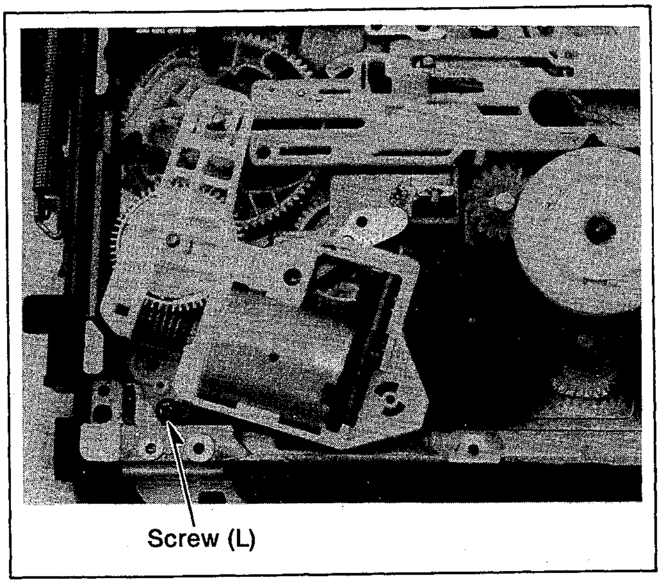


Fig. K11

4-12. ASSEMBLY OF THE TIMING BELT & SS BRAKE BASE

1) Install the TIMING BELT.

2) Put the TIMING BELT onto the TENSION ROLLER, slide the SS BRAKE BASE into position and install 2 screws(M).

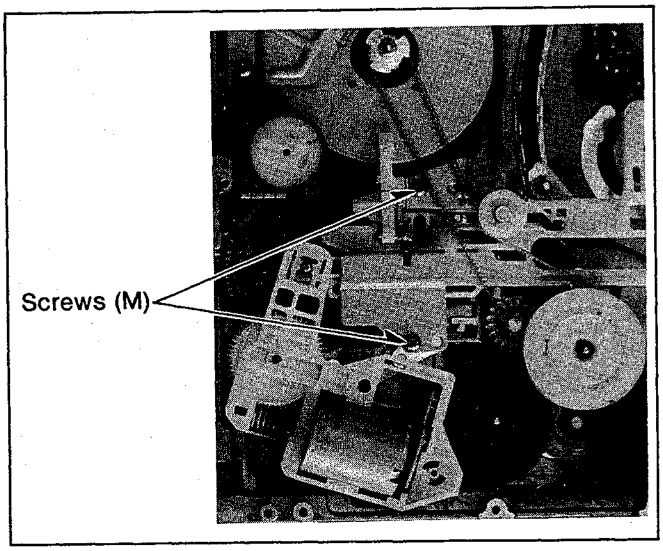


Fig. K12

4–13. ASSEMBLY OF THE PINCH ARM UNIT

1) Install the OPENER PIECE by inserting the boss into the PINCH ARM UNIT. Push down until the lock engages the shaft.

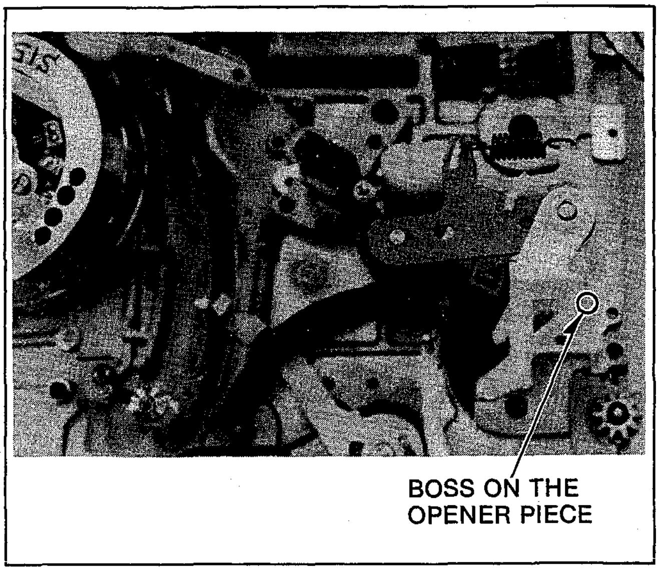


Fig. K13

4–14. CHECKING THE MECHANISM MOVEMENT

1) Check by moving the mechanism by hand then re–check using a battery to power the motor.
2) Rotate the LOADING MOTOR by hand in the loading direction while checking the movement of each gear. If the mechanism operates correctly when moved by hand, connect a battery to the LOADING MOTOR and re–check the movement of each gear as shown in Fig.S1/S2/S3.
3) Connect the battery to check the loading operation and then reverse the battery connection to check the unloading operation.
4) Reverse the battery to move the mechanism to the cassette down position.

4–15. ASSEMBLY OF THE CASSETTE HOLDER

1. A SSEMBLE A CASSETTE HOLDER AS A UNIT COMPLETE UNIT

1) Put the CASSETTE HOLDER into the cassette up condition by moving the WIPER ARM.
2) Turn the LOADING MOTOR by hand in the unloading direction until the CARRIAGE CONNECTION GEAR and the MODE SW is eject position as shown in Fig.K14/K15

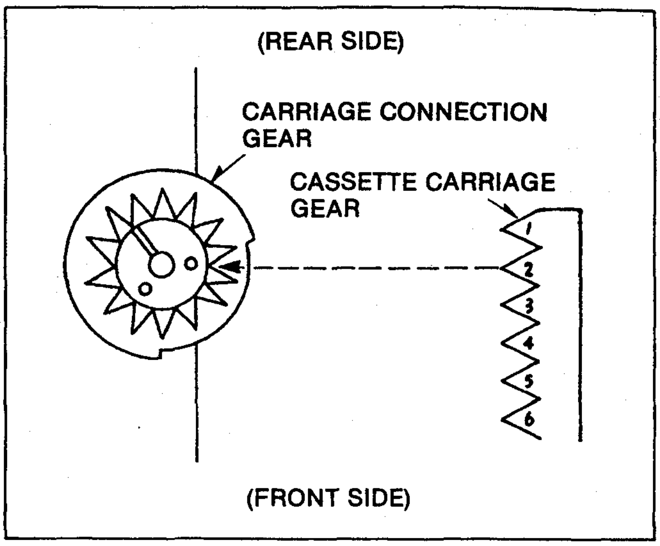


Fig. K14

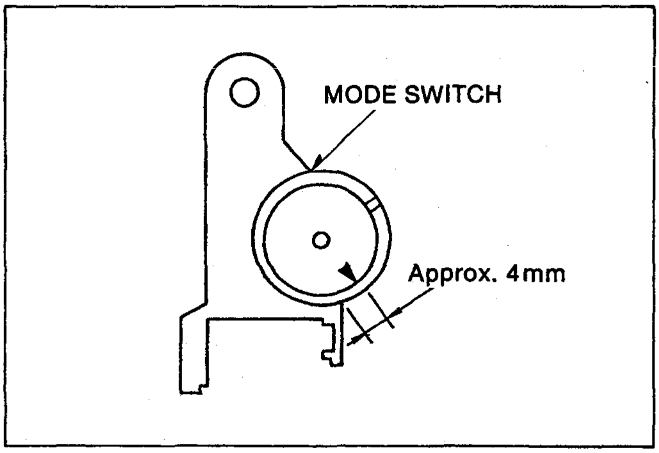


Fig. K15

3) Install the CASSETTE HOLDER UNIT as shown in Fig.K14.
4) Install 4 screws to attach the CASSETTE HOLDER UNIT.

<Eject Operation>

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear will not rotate.
For performing the Eject operation with the cassette carriage not installed, it is necessary to rotate to the carriage connection gear by hand in the direction of the arrow.

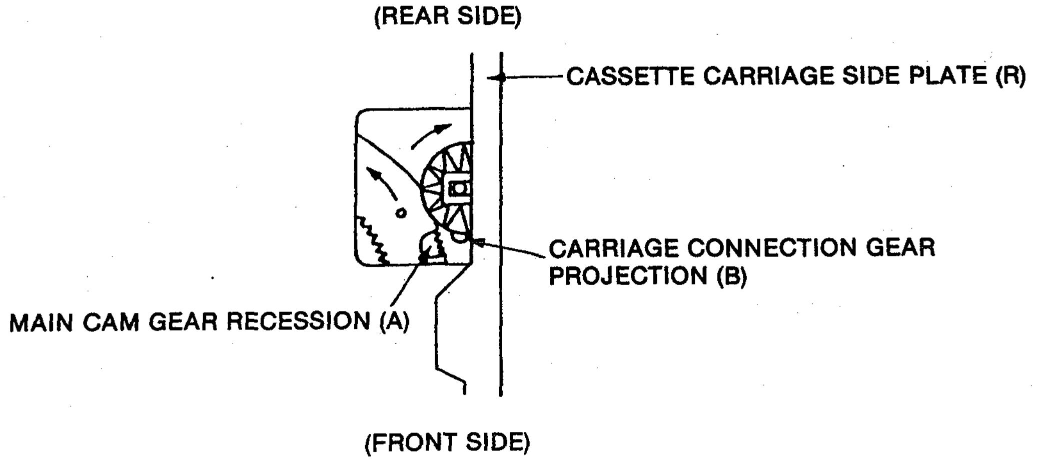

(REAR SIDE)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(FRONT SIDE)

Fig. K16 Top View of Eject Operation

2. ASSEMBLE A CASSETTE HOLDER SEPARATELY

1) Put the CASSETTE HOLDER into the cassette down position by moving the WIPER ARM. Check the position of the WIPER ARM and RACK A. The mark of RACK A aligns with the mark on the WIPER ARM.

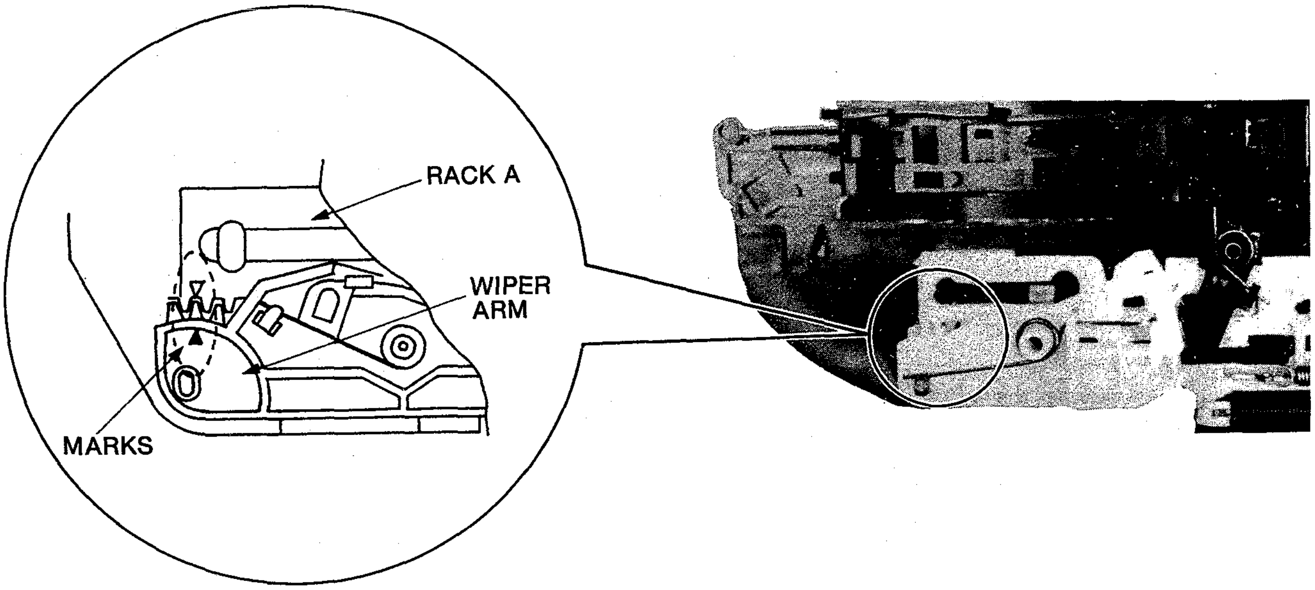

RACK A
WIPER ARM
MARKS

Fig. K17

2) Install the SIDE PLATE ASSEMBLY so that the first gear of RACK B aligns with the mark on the CARRIAGE CONNECTION GEAR.

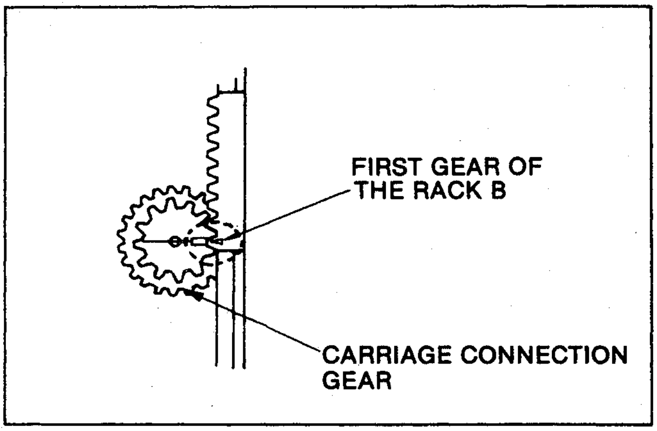


Fig. K18

3) Install 4 screws to attach the SIDE PLATE ASSEMBLY.

4) Turn the LOADING MOTOR by hand to the cassette up position while pushing the WIPER ARM to the cassette up position.

5) Insert the 5 posts on the CASSETTE HOLDER into the Side Plate.

6) Set the TOP PLATE on the Side Plate then push it down until it locks.

4-16. ASSEMBLY OF THE MECHANISM CHASSIS

1) Install the MECHANISM CONNECTION C.B.A. onto the chassis. Then install the chassis into the frame and connect all the cables and connectors.

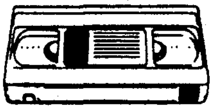
2) Clean the DD CYLINDER after reinstallation.

3) Insert a cassette and adjust the tape travel and check all the operation modes.

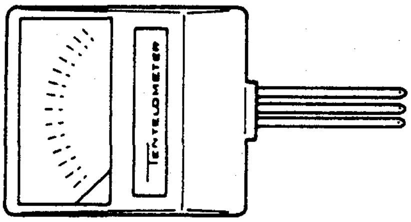
Servicing Fixtures & Tools

VFJ8125H3F
PAL VHS Alignment Tape

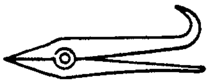
VFM8080HQFP
NTSC VHS Alignment Tape



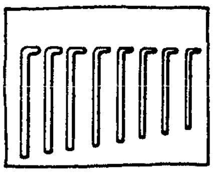
VFK0132
Back Tension Meter
(Tentelometer, Made in U.S.A.)



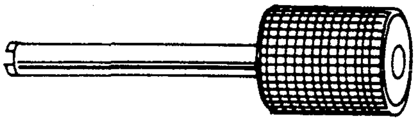
VFK0335
Retaining Ring Remover
(3mm/4mm)



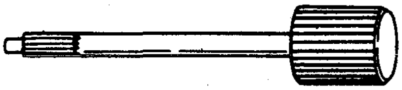
VFK0326
Hex. Wrench Set
(0.7, 0.9, 1.2, 1.5, 1.6, 2.0, 2.4, 3.0mm)



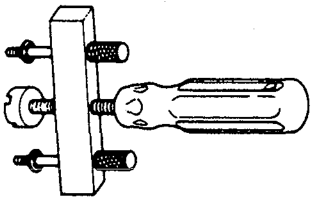
VFK0329
Post Adjustment Screw Driver



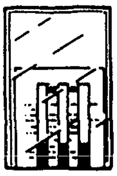
VFK0330
Fine Adjustment Gear Driver



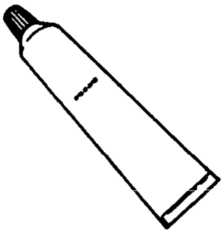
VFK0341
Upper Cylinder Remover



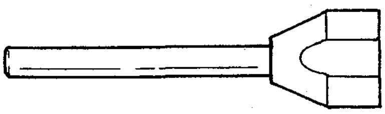
VFK27
Hand Cleaning Stick



MOR265
Morlytone Grease



VFK0851
CENTRE FIXING TOOL



5. PARTS CHANGE

5-1. Parts List

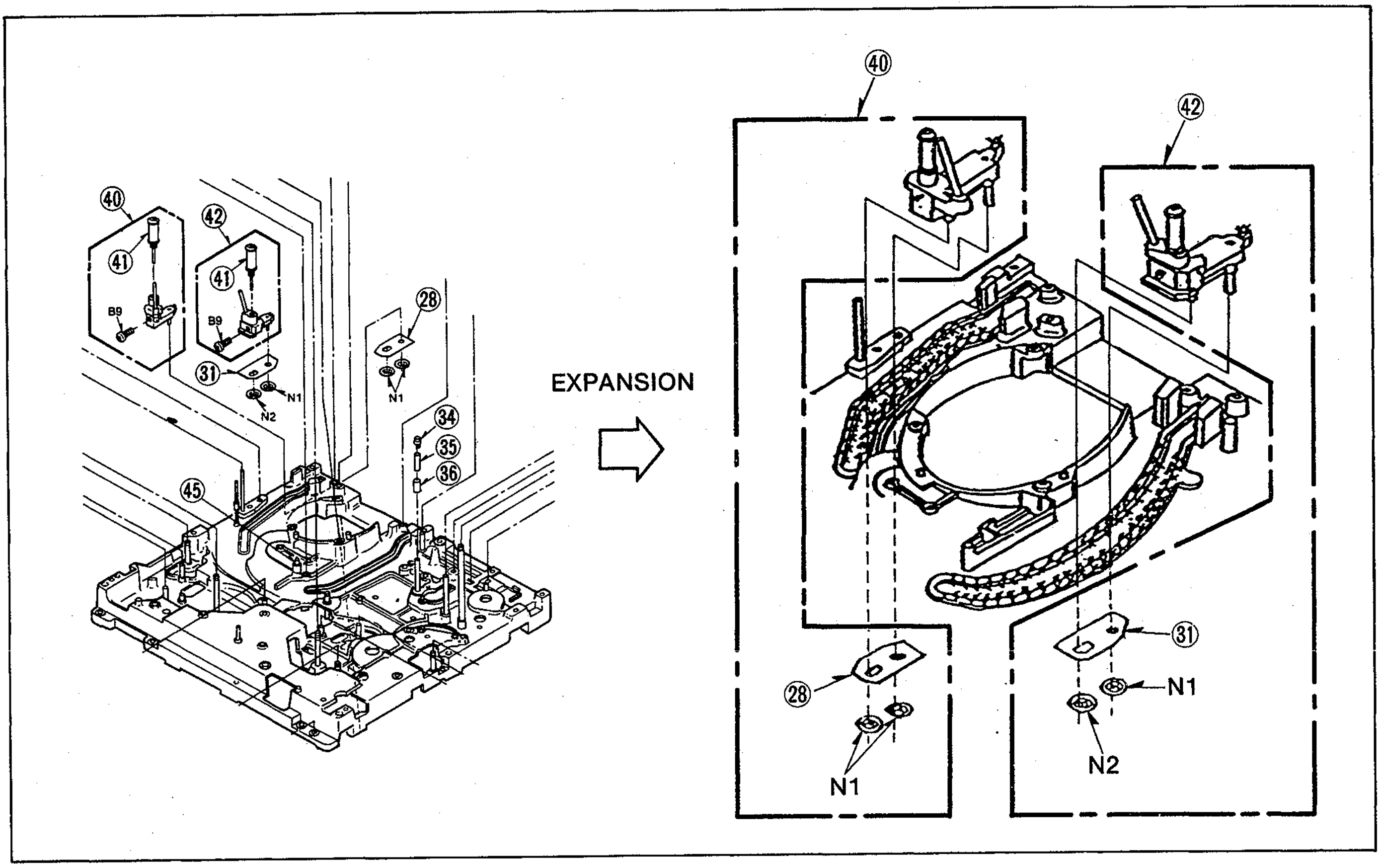
This list shows parts change for SUPPLE 1~3(SUPPLEMENT 1~3). When using or ordering the parts below, refer to this.

Note:(1)Parts indicated by " ▲ " do not have interchangeability.
(2)Parts indicated by " ● " should be used on New Part(SUPPLE1,2 or 3).

Ref.No.	Part Name	Original	SUPPLE1	SUPPLE2	SUPPLE3	
20(1)	A/C HEAD(1) UNIT	VED0182	VED0205			
28(1) ●	INCLINED BASE HOLDER(S)	VMD1937	VMA8874			
31(1) ●	INCLINED BASE HOLDER(T)	VMD1959	VMA8873			
32(1) ●	OPENER PIECE	VMD1960	VMD2101			
37(1)	TENSION RELEASE ARM	VML2772	-------			
40(1) ●	INCLINED BASE(S) UNIT	VXA4801	VXA4982KIT			
40(1) ●	INCLINED BASE(S) UNIT	VXA4982	VXA4982KIT			
41(1) ●	ROLLER POST	VXP1363A	VXP1415			
42(1) ●	INCLINED BASE(T) UNIT	VXA4803	VXA4984KIT			
42(1) ●	INCLINED BASE(T) UNIT	VXA4984	VXA4984KIT			
43(1)	ROLLER POST(T)	VXP1363	-------			
45(1) ●	CASSETTE POSITION	VMS2558	VMS5383			
	FIXTURE					
N1	PUSH HOLDER	-------	VHN0192			
N2	PUSH HOLDER	-------	VHN0193			

SUPPLE1(SUPPLEMENT SERVICE MANUAL) ··· Order No. VRD9305S015

5-2. Exploded Views of Inclined Base (S),(T) Unit


㊵
㊷
㊶
B9
㊶
B9
㉘
㉛
N1
N2
N1
㉞
㉟
㊱
㊺
EXPANSION
㊵
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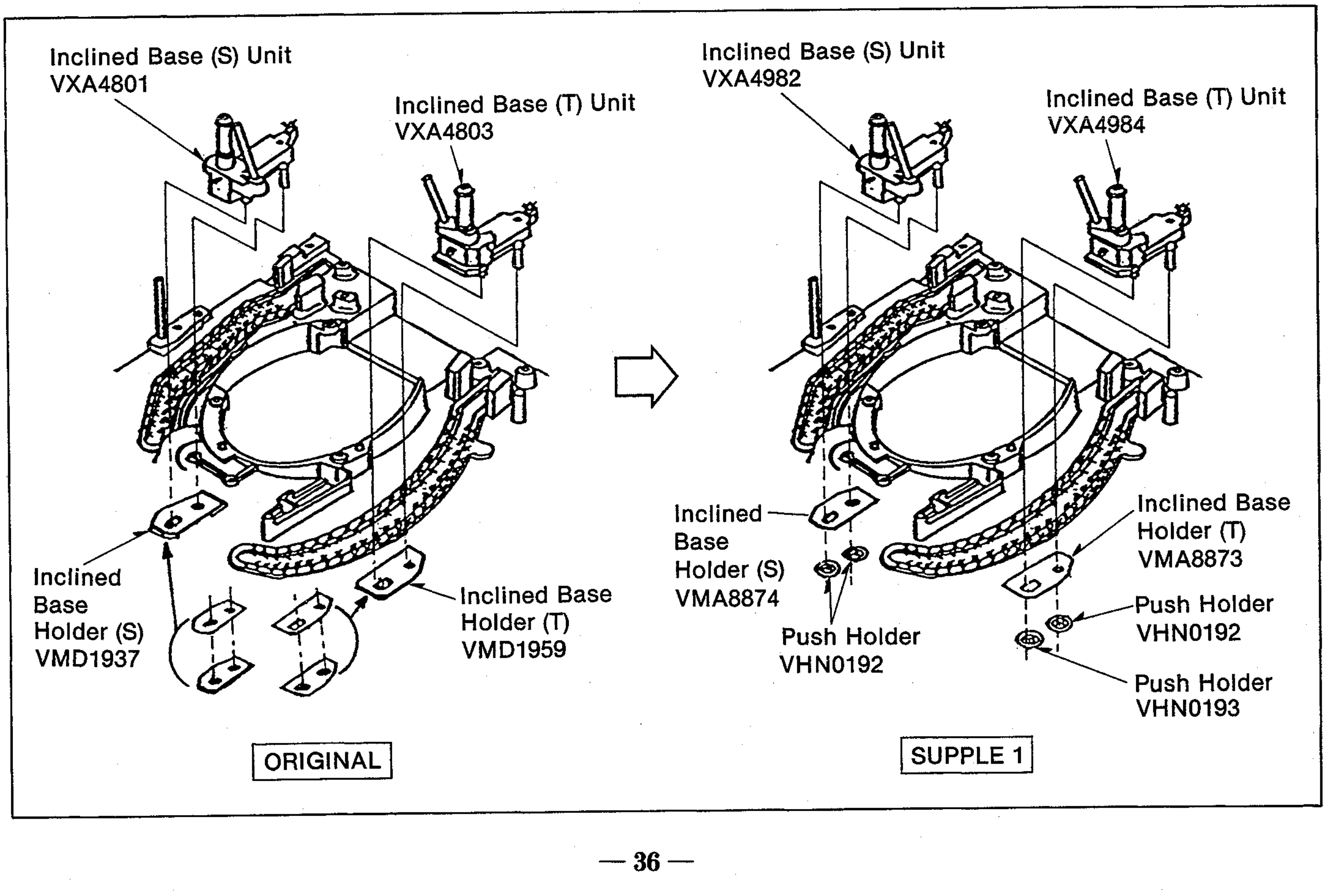
㉛
N1
㉘
N2
N1

5-3. Inclined Base (S),(T) Unit Changes


Inclined Base (S) Unit
VXA4801
Inclined Base (T) Unit
VXA4803
Inclined Base Holder (S)
VMD1937
Inclined Base Holder (T)
VMD1959
ORIGINAL
Inclined Base (S) Unit
VXA4982
Inclined Base (T) Unit
VXA4984
Inclined Base Holder (S)
VMA8874
Push Holder
VHN0192
Inclined Base Holder (T)
VMA8873
Push Holder
VHN0192
Push Holder
VHN0193
SUPPLE 1

6. TROUBLE SHOOTING

SYMPTOM	CAUSE/*CHECK POINT
NO SOUND IN SELF RECORD	REPLACE A/C HHEAD *IC600(34)(35) ⇨ OK
TAPE STUCK WHEN EJECTED	TAKE UP BRAKE ARM UNIT(VXZ0313) OFF *TAKE UP REEL NOT ROTATING
NOISY PICTURE IN PLAYBACK	DD CYLINDER CUT LEAD OF LOWER CYLINDER(VEG0987) *RF ENVELOPE DOESN'T APPEAR
CASSETTE BLINDER DOESN'T CLOSE	PHASE ERROR BETWEEN SIDE PLATE & CARRIAGE CONNECTION GEAR(VXA4806 & VDG0871) *VISUALLY CHECK
BAR NOISE IN PLAYBACK	DUST IN INCLINED BASE(VXA4801) *P.B PRE-RECORDED TAPE ⇨ NG SELF-RECORDED TAPE ⇨ OK
NOISY PICTURE IN SELF-REC/P.B	A/C HEAD IS DIRTY *NO CONTROL PULSE
TAPE CHEWED	P5 ARM UNIT BENT, BROKEN P5 STOPPER (VXL2306, VXA2229) *VISUALLY CHECK
THE TAPE DOESN'T LOAD	IDLER CONTROL LEVER(VML2725) NOT INSTALLED CORRECTLY
TAPE RUNNING NOISE WHEN FF	IDLER ARM(VXL2229)

SYMPTOM	CAUSE/*CHECK POINT
NOISY PICTURE IN SELF-REC/P.B(LP)	A/C HEAD DIRTY *NO CONTROL PULSE
TAPE EJECTED INSTANTLY AFTER INSERTING	PHASE ERRER BETWEEN SIDE PLATE & CARRIAGE CONNECTION GEAR(VXA4806 & VDG0871) *VISUALLY CHECK
UNIT IS IN CUE MODE WHEN PLAY BUTTON PRESSED	INCLINED BASE(S), VXA4801 NOT COMPLETELY LOCKED *GREASE TO V STOPPER AND INCLINED BASE
CAN NOT INSERT TAPE	BROKEN HOLDER PLATE LEVER(VXA4661)
TAPE DAMAGE	REPLACE PINCH ROLLER(VXA2246)

Order No. *VRD9305S015*

Service Manual

Video Product

Model No. *All K-Mecha. Models*

Supplement

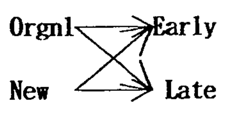
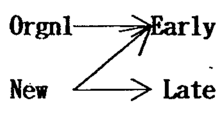
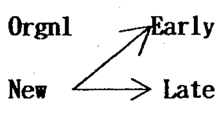
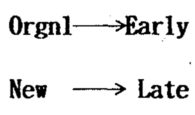
Effective from: *Mentioned in Remarks*

Subject: *Change of K-Mecha. Parts*

Please use this manual together with the Service Manual
Model No. *All K-Mecha. Models*

The following Parts have been changed to improve the performance of K-Mechanism.

INTERCHANGEABLITY CODE See the I/C column on the following Part Number list

A	Parts Prdctn	B	Parts Prdctn	C	Parts Prdctn	D	Parts Prdctn	E	Addition
	 Orgnl Early New Late		 Orgnl Early New Late		 Orgnl Early New Late		 Orgnl Early New Late	F	Deletion
								G	Other

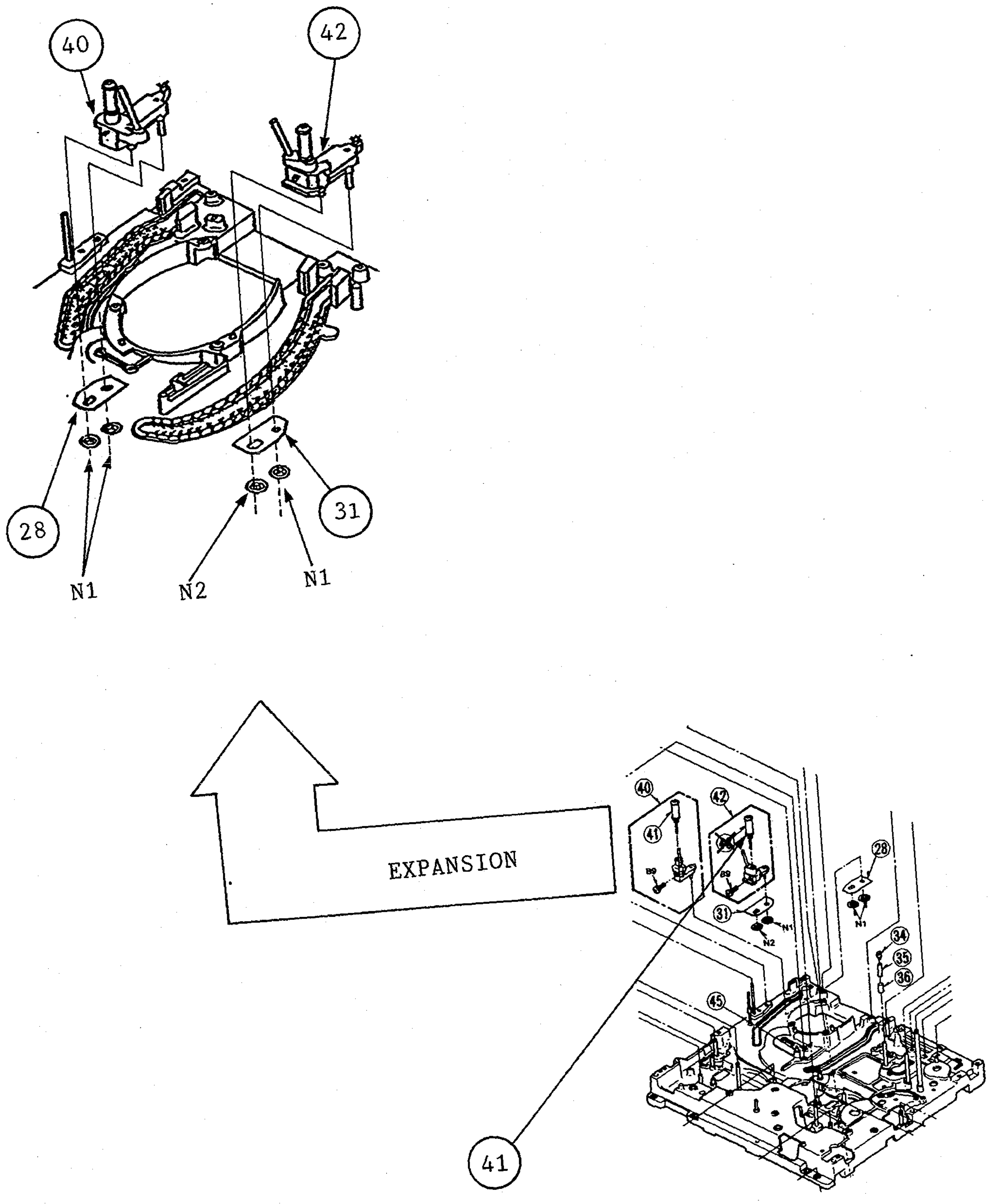
Parts Number List

Ref. No.	Original Part NO.	New Part No.	Part Name & Description	I/C	Remarks
20(1)	VED0182	VED0205	A/C HEAD(1) UNIT	A	Running Change
28(1)	VMD1937	VMA8874	INCLINED BASE HOLDER(S)	C	First Production
31(1)	VMD1959	VMA8873	INCLINED BASE HOLDER(T)	C	First Production
32(1)	VMD1960	VMD2101	OPENER PIECE	C	First Production
37(1)	VML2772	———	TENSION RELEASE ARM	F	First Production
40(1)	VXA4801	VXA4982KIT	INCLINED BASE(S) UNIT	C	First Production
40(1)	VXA4982	VXA4982KIT	INCLINED BASE(S) UNIT	C	First Production
41(1)	VXP1363A	VXP1415	ROLLER POST	C	First Production
42(1)	VXA4803	VXA4984KIT	INCLINED BASE(T) UNIT	C	First Production
42(1)	VXA4984	VXA4984KIT	INCLINED BASE(T) UNIT	C	First Production
43(1)	VXP1363	———	ROLLER POST(T)	F	First Production
45(1)	VMS2558	VMS5383	CASSETTE POSITION FIXTURE	C	First Production
N1	———	VHN0192	PUSH HOLDER	E	First Production
N2	———	VHN0193	PUSH HOLDER	E	First Production

(*)Refer to the Exploded View on the other
side of this page.

Panasonic

[Exploded Views of Inclined Base(S),(T) Unit]


40
42
28
31
N1
N2
N1
EXPANSION
40
41
B9
42
B9
31
N1
N2
28
N1
34
35
36
45
41

Order No. VRD9605S018

Service Manual

Supplement

Effective from: First Production

Video Product

Model No. ALL G-MECHANISM
ALL K-MECHANISM

Subject: Capstan FG Adjustment

Please use this manual together with the Service Manual for Order No.
Model No.

CAPSTAN FG ADJUSTMENT

(Equipment Required)
Fine Adjustment Gear Driver (VFK0330)
(Specification)
G-Mechanism: 0.16+-0.04mm
K-Mechanism: 0.15+-0.04mm

1. Slightly loosen screw for FG Head and set the Fine Adjustment Gear Driver into the hole(A).
2. Turn the Fine Adjustment Gear Driver counter-clockwise until the FG Head touches the rotor.
   Then turn it slightly clockwise to the clearance as specified.
3. Tighten screw for FG Head.

Note:
Do not touch the outside circumference of the rotor surface with any tool and keep magnetic material away from the rotor magnet.

(Confirmation)
1) Record the video signal in LP(PAL)/SLP(NTSC) mode.
2) Measure the output of FG1 and FG2 which supplied from Capstan Stator Unit.
3) Confirm that the signal is more than 30mVp-p (G-Mech)/20mVp-p(K-Mech) as shown in Fig. CF2.

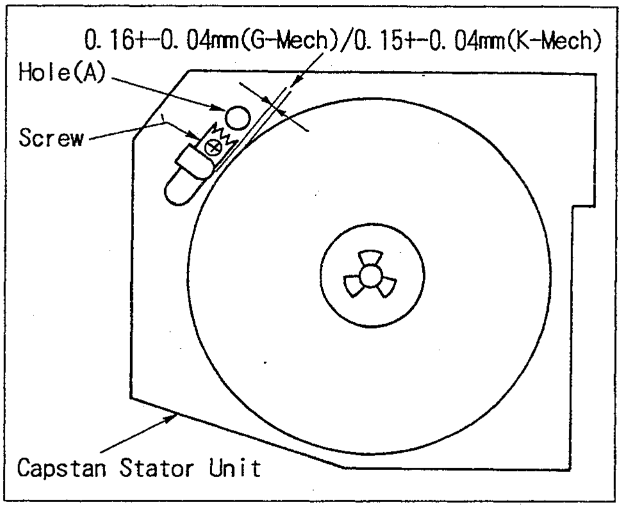


Fig. CF1

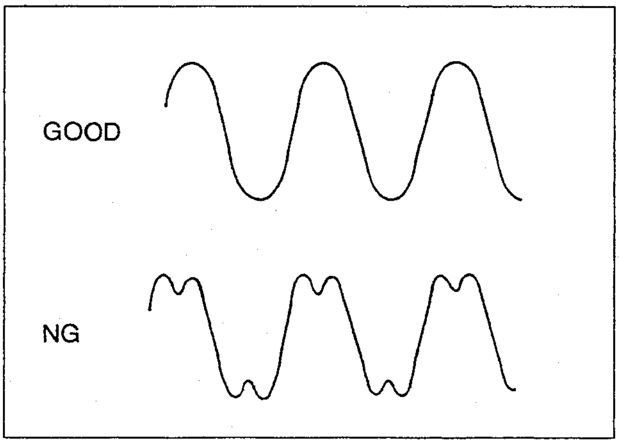


Fig. CF2

⚠ WARNING
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ORDER NO. VRD9508M127

Service Manual

Video Cassette Player

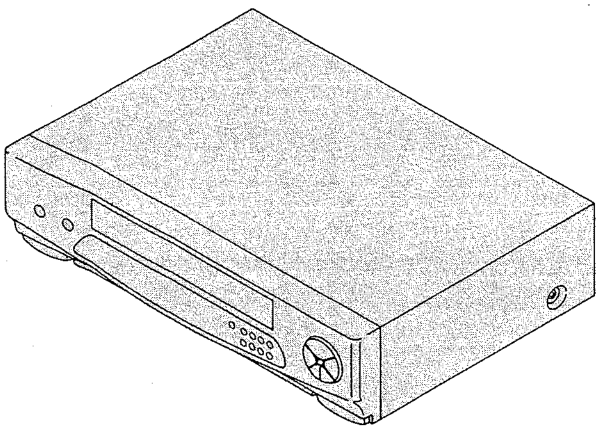
Panasonic VHS HQ
PAL NTSC4.43

NV-SD200A/BA
NV-SD205AM

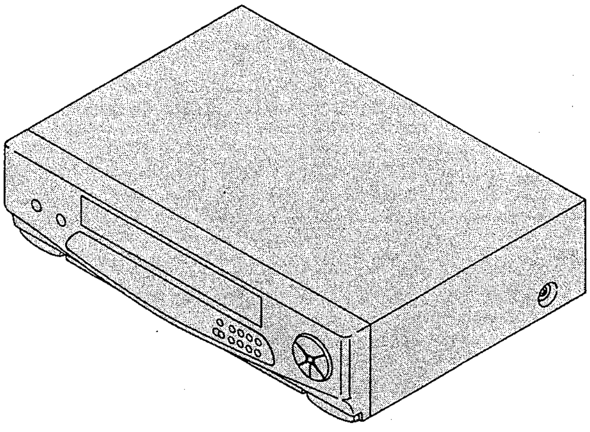
K-MECHANISM

Simplified

/14969



NV-SD200A/BA



NV-SD205AM

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INTRODUCTION

This service manual contains technical information which will help service personnel to understand and service the VHS Video Cassette Recorder NV-SD200A/BA/NV-SD205AM.
Since this model has been developed from NV-SD200AM/NV-SD250A/EA/BA, this manual does not cover the same part which is already described in the service manual for NV-SD200AM/NV-SD250A/EA/BA.
Therefore, when servicing, refer to the descriptions in the one for NV-SD200AM/NV-SD250A/EA/BA Order No. VRD9507M122.

SPECIFICATIONS (NV-SD200A/BA)

ITEM	SPECIFICATIONS
POWER	SOURCE: 240V, 50/60 Hz (SD200A) 220-240V, 50/60 Hz (SD200BA)
	CONSUMPTION: 19 watts
RECORDING SYSTEM	2 rotary heads, helical scanning system
	PAL
TV TUNER SYSTEM	VHF: CH0 – CH12, 75Ω unbalanced (SD200A) CH4 – CH11, 75Ω unbalanced (SD200BA) UHF: CH21 – CH69, 75Ω unbalanced (SD200A) CH21 – CH68, 75Ω unbalanced (SD200BA)
RF OUT SYSTEM	VHF, UHF : CH37 ± 6 (SD200A) CH38 ± $\frac{2}{8}$ (SD200BA) 73 ± 3 dBμ, 75Ω terminated
VIDEO	HEADS: 2 rotary heads 1pair for recording, playback and trickplay (L-R heads)
	INPUT: VIDEO IN Connector (Phono type) 1.0 Vp-p, 75Ω terminated
	OUTPUT: VIDEO OUT Connector (Phono type) 1.0 Vp-p, 75Ω terminated

ITEM	SPECIFICATION
AUDIO	HEAD: 1 Stationary head (Normal Audio)
	INPUT: AUDIO IN Connector (Phono type) More than -10dBV (316mV), More than 50 kΩ
	OUTPUT: AUDIO OUT Connector (Phono type) More than -6dBV (500mV), Less than 1 kΩ
TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
TAPE SPEED	SP: 23.39 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape FF/REW Time: 2 minutes 30 seconds with 180 min. type tape
OPERATING CONDITION	Temperature : 5℃ – 40℃ Humidity : 35% – 80%
DIMENSIONS	430 (W)X99.9 (H)X295(D) mm
WEIGHT	4.2 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Remote Controller 1 pc. AC Cord

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

SPECIFICATIONS (NV-SD205AM)

ITEM	SPECIFICATIONS
POWER	SOURCE: 110V, 50/60 Hz
	CONSUMPTION: 19 watts
RECORDING SYSTEM	2 rotary heads, helical scanning system
	PAL
TV TUNER SYSTEM	CHINA VHF: CH1 – CH12, 75Ω unbalanced UHF: CH13 – CH56, 75Ω unbalanced CATV: Z1 – Z17
	CCIR VHF: CHE1 – CHE12, 75Ω unbalanced UHF: CH21 – CH69, 75Ω unbalanced CATV: S01 – S05, M1 – M10 and U1 – U10
	OIRT VHF: CH1 – CH12, 75Ω unbalanced UHF: CH21 – CH69, 75Ω unbalanced CATV: 44 – 300MHz
	HONG - KONG VHF: —, 75Ω unbalanced UHF: CH21 – CH69, 75Ω unbalanced
RF OUT SYSTEM	CHINA UHF: CH25 $\pm \frac{4}{3}$, 73 ± 3 dBμ, 75Ω terminated
	CCIR, OIRT, HONG - KONG UHF: CH38 $\pm \frac{2}{8}$, 73 ± 3 dBμ, 75Ω terminated

ITEM	SPECIFICATION
VIDEO	HEADS: 2 rotary heads 1pair for recording, playback and trickplay (L-R heads)
	INPUT: VIDEO IN Connector (Phono type) 1.0 Vp-p, 75Ω terminated
	OUTPUT: VIDEO OUT Connector (Phono type) 1.0 Vp-p, 75Ω terminated
AUDIO	HEAD: 1 Stationary head (Normal Audio)
	INPUT: AUDIO IN Connector (Phono type) More than -10dBV (316mV), More than 50 kΩ
	OUTPUT: AUDIO OUT Connector (Phono type) More than -6dBV (500mV), Less than 1 kΩ
TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
TAPE SPEED	SP: 23.39 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape FF/REW Time: 2 minutes 30 seconds with 180 min. type tape
OPERATING CONDITION	Temperature : 5℃ – 40℃ Humidity : 35% – 80%
DIMENSIONS	430 (W)X99.9 (H)X295(D) mm
WEIGHT	4.2 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Remote Controller 1 pc. AC Cord

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

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1. COMPARISON CHART & EXPLODED VIEWS

1-1. COMPARISON CHART

These charts show the difference between the basic model NV-SD250A/BA,NV-SD200AM and the new model NV-SD200A/BA,NV-SD205AM.

> **Note: IMPORTANT SAFETY NOTICE**
> Parts indicated by the mark < ! > have the special safety characteristics.
> When replacing any of these parts, use only the same type.

NV-SD200A Electrical Replacement Parts (A): Added, (C): Changed, (D): Deleted

Ref.NO.	NV-SD250A	NV-SD200A	Pieces	Parts Name & Descriptions	Remarks
	VEP06996B	VEPO6996H	1	MAIN C.B.A.	(C)
	———	VEP07795B	0 → 1	OPERATION C.B.A.	(A)
	VEP05217A MISCELLANEOUS VSC4209	———	1 → 0	SHIELD CASE (B)	(D)

NV-SD200A Mechanical Replacement Parts (A): Added, (C): Changed, (D): Deleted

Ref.NO.	NV-SD250A	NV-SD200A	Pieces	Parts Name & Descriptions	Remarks
128 (2)	VXA5138	VMA8965	1	SS BRAKE BASE	(C)
201 (3)	VYP5924	VYP6046	1	FRONT PANEL UNIT	(C)
220 (3)	———	VMZ2212	0 → 3	CAPACITOR COVER	(A) < ! >
221 (3)	———	VWJ0957	0 → 1	FLAT CARD CABLE	(A) P3001-P507
222 (3)	———	VEE9675	0 → 1	WIRE CABLE	(A) P4002-FE HEAD
223 (3)	———	VWJ0904	0 → 1	FLAT CARD CABLE	(A) P2506-CAPSTAN
224 (3)	———	VEE9223	0 → 1	WIRE CABLE	(A) P2505-POWER TR.
225 (3)	———	VWJ0958	0 → 1	FLAT CARD CABLE	(A) P2502-CYLINDER
226 (3)	———	VMX2233	0 → 2	SPACER	(A)
227 (3)	———	VSC4209	0 → 1	SHIELD CASE (B)	(A)
300 (4)	VQT6148	VQT6279	1	OPERATING INSTRUCTIONS (ENGLISH)	(C) < ! >
304 (4)	VEQ1637	EUR571117	1	REMOTE CONTROLLER	(C)
306 (4)	VKF2115	UR57EC490	1	BATTERY COVER	(C)
310 (4)	VPG8008	VPG8179	1	PACKING CASE	(C)
400 (5)	VYK6262	———	1 → 0	TOP COVER UNIT	(D)
401 (5)	VYK5446	———	1 → 0	BOTTOM COVER UNIT	(D)
402 (5)	VYK6388	———	1 → 0	DOOR PANEL UNIT	(D)
403 (5)	VKF2115	UR57EC490	1	BATTERY COVER	(C)
404 (5)	VKW1802	———	1 → 0	IR WINDOW	(D)
406 (5)	VSP0842	———	1 → 0	RUBBER CONTACT	(D)
B401 (5)	XTB2+6G	———	1 → 0	SCREW	(D)
B402 (5)	XTB2+8GFZ	———	1 → 0	SCREW	(D)

NV-SD200BA Electrical Replacement Parts (A): Added, (C): Changed, (D): Deleted

Ref.NO.	NV-SD250BA	NV-SD200BA	Pieces	Parts Name & Descriptions	Remarks
	VEP06996D	VEPO6996J	1	MAIN C.B.A.	(C)
	———	VEP07795B	0 → 1	OPERATION C.B.A.	(A)
	VEP05217A MISCELLANEOUS VSC4209	———	1 → 0	SHIELD CASE (B)	(D)

NV-SD200BA Mechanical Replacement Parts (A): Added, (C): Changed, (D): Deleted

Ref.NO.	NV-SD250BA	NV-SD200BA	Pieces	Parts Name & Descriptions	Remarks
128 (2)	VXA5138	VMA8965	1	SS BRAKE BASE	(C)
201 (3)	VYP6047	VYP6046	1	FRONT PANEL UNIT	(C)
220 (3)	———	VMZ2212	0 → 3	CAPACITOR COVER	(A) <!>
221 (3)	———	VWJ0957	0 → 1	FLAT CARD CABLE	(A) P3001-P507
222 (3)	———	VEE9675	0 → 1	WIRE CABLE	(A) P4002-FE HEAD
223 (3)	———	VWJ0904	0 → 1	FLAT CARD CABLE	(A) P2506-CAPSTAN
224 (3)	———	VEE9223	0 → 1	WIRE CABLE	(A) P2505-POWER TR.
225 (3)	———	VWJ0958	0 → 1	FLAT CARD CABLE	(A) P2502-CYLINDER
226 (3)	———	VMX2233	0 → 2	SPACER	(A)
227 (3)	———	VSC4209	0 → 1	SHIELD CASE (B)	(A)
300 (4)	VQT6276	VQT6280	1	OPERATING INSTRUCTIONS (ENGLISH/AFRIKAANS)	(C) <!>
304 (4)	VEQ1646	EUR571117	1	REMOTE CONTROLLER	(C)
306 (5)	VKF2115	UR57EC490	1	BATTERY COVER	(C)
310 (4)	VPG8176	VPG8180	1	PACKING CASE	(C)
400 (5)	VYK6285	———	1 → 0	TOP COVER UNIT	(D)
401 (5)	VYK5446	———	1 → 0	BOTTOM COVER UNIT	(D)
402 (5)	VYK6388	———	1 → 0	DOOR PANEL UNIT	(D)
403 (5)	VKF2115	UR57EC490	1	BATTERY COVER	(C)
404 (5)	VKW1802	———	1 → 0	IR WINDOW	(D)
406 (5)	VSP0842	———	1 → 0	RUBBER CONTACT	(D)
B401 (5)	XTB2+6G	———	1 → 0	SCREW	(D)
B402 (5)	XTB2+8GFZ	———	1 → 0	SCREW	(D)

NV-SD205AM Electrical Replacement Parts (A): Added, (C): Changed, (D): Deleted

Ref.NO.	NV-SD200AM	NV-SD205AM	Pieces	Parts Name & Descriptions	Remarks
	VEP06996A	VEPO6996E	1	MAIN C.B.A.	(C)
	VEP07801N	VEP07801L	1	VIF PACK C.B.A.	(C)
	VEP05217A MISCELLANEOU VSC4209		1 → 0	SHIELD CASE (B)	(D)

NV-SD205AM Mechanical Replacement Parts (A): Added, (C): Changed, (D): Deleted

Ref.NO.	NV-SD200AM	NV-SD205AM	Pieces	Parts Name & Descriptions	Remarks
128 (2)	VXA5138	VMA8965	1	SS BRAKE BASE	(C)
201 (3)	VYP5922	VYP6045	1	FRONT PANEL UNIT	(C)
221 (3)	———	VWJ0957	0 → 1	FLAT CARD CABLE	(A) P3001-P507
222 (3)	———	VEE9675	0 → 1	WIRE CABLE	(A) P4002-FE HEAD
223 (3)	———	VWJ0904	0 → 1	FLAT CARD CABLE	(A) P2506-CAPSTAN
224 (3)	———	VEE9223	0 → 1	WIRE CABLE	(A) P2505-POWER TR.
225 (3)	———	VWJ0958	0 → 1	FLAT CARD CABLE	(A) P2502-CYLINDER
226 (3)	———	VMX2233	0 → 2	SPACER	(A)
227 (3)	———	VSC4209	0 → 1	SHIELD CASE (B)	(A)
212 (3)	VXA5536	VXA5537	1	JACK BOARD UNIT	(C)
220 (3)	———	VMZ2212	0 → 2	CAPACITOR COVER	(A) <!>
300 (4)	VQT6147	VQT6274	1	OPERATING INSTRUCTIONS (ENGLISH/ARABIC/RUSSIAN)	(C) <!>
310 (4)	VPG8006	VPG8178	1	PACKING CASE	(C)

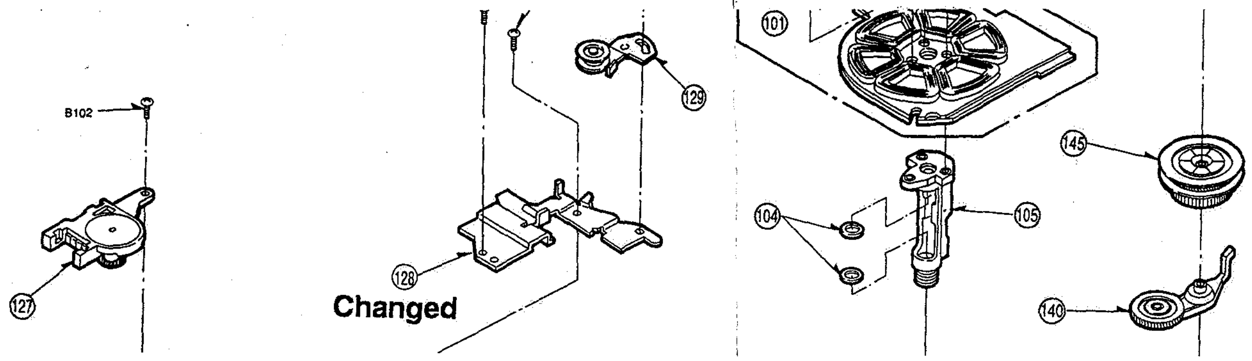
1-2. EXPLODED VIEWS

1. CHASSIS PARTS SECTION (1)

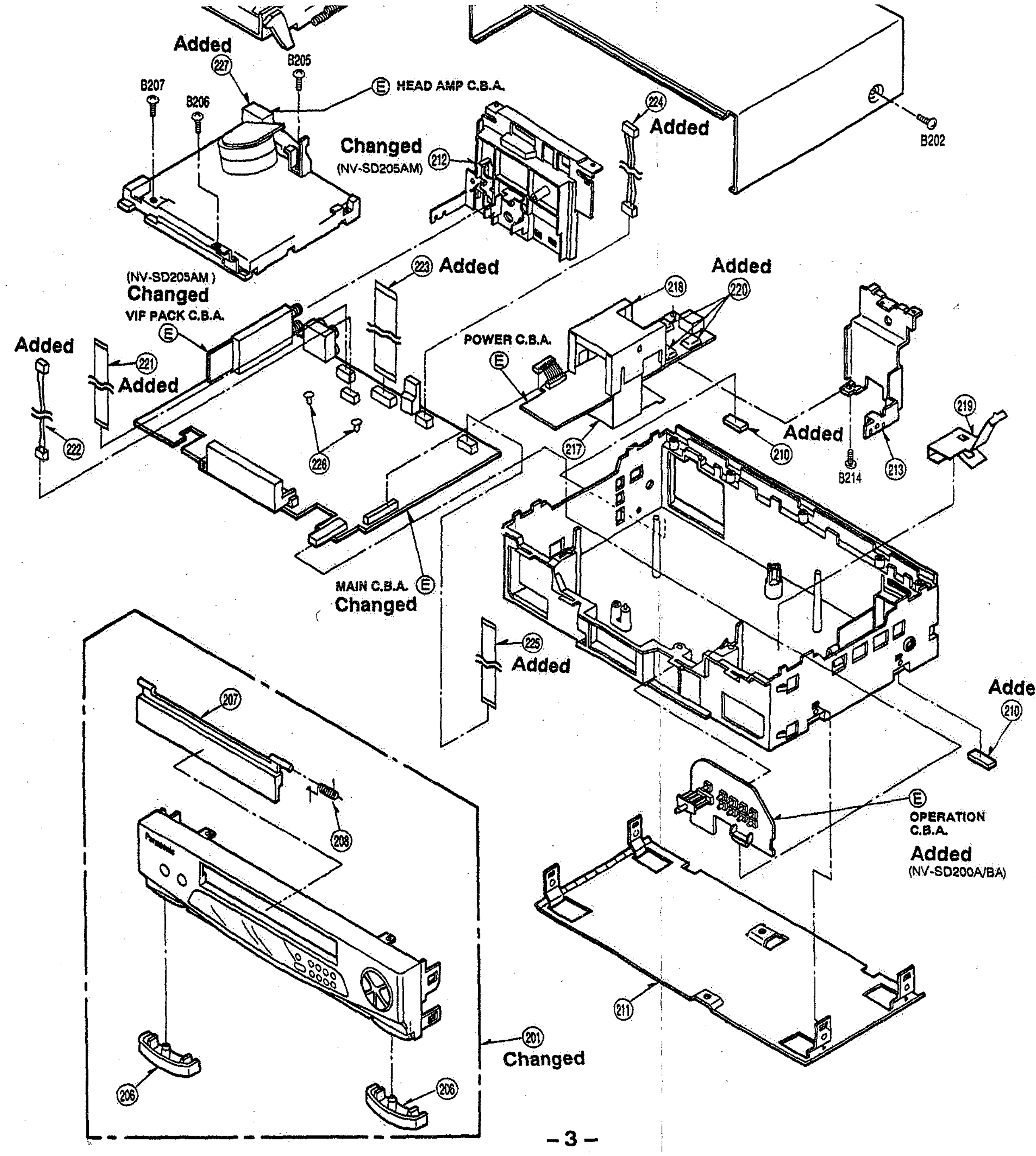
＊Refer to NV-SD200AM,NV-SD205A/EA/BA Service Manual (Page 5-1).

2. CHASSIS PARTS SECTION (2)

＊Refer to NV-SD200AM,NV-SD205A/EA/BA Service Manual (Page 5-3).


B102
101
129
145
104
105
127
126
Changed
140

3. CASING PARTS SECTION


Added
227
B205
B207
B206
E HEAD AMP C.B.A.
224
Added
B202
Changed
(NV-SD205AM)
212
223 Added
(NV-SD205AM)
Changed
VIF PACK C.B.A.
E
Added
218
220
Added
221
Added
POWER C.B.A.
E
222
226
217
Added
210
B214
213
219
MAIN C.B.A. E
Changed
225
Added
Added
210
207
208
E
OPERATION
C.B.A.
Added
(NV-SD200A/BA)
211
201
Changed
206
206

4. PAC

eleted

AD
TAN
R TR.
DER

eleted

eleted

AD
TAN
R TR.
DER

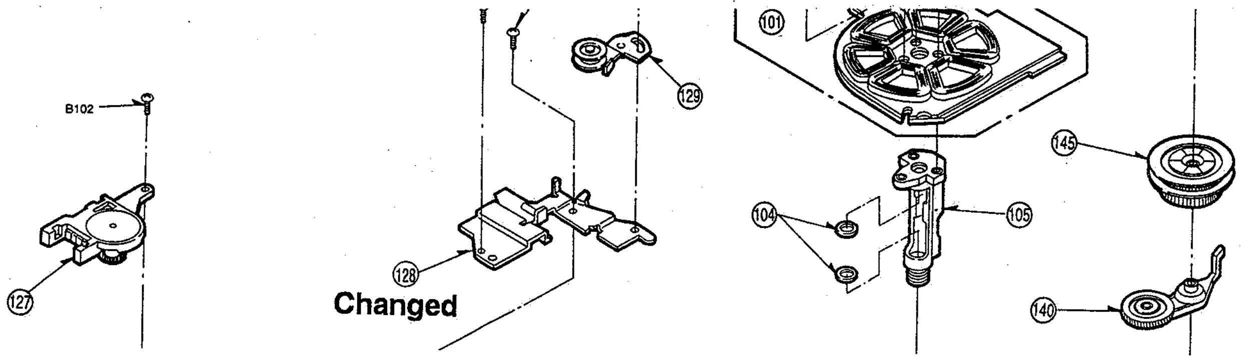
1-2. EXPLODED VIEWS

1. CHASSIS PARTS SECTION (1)

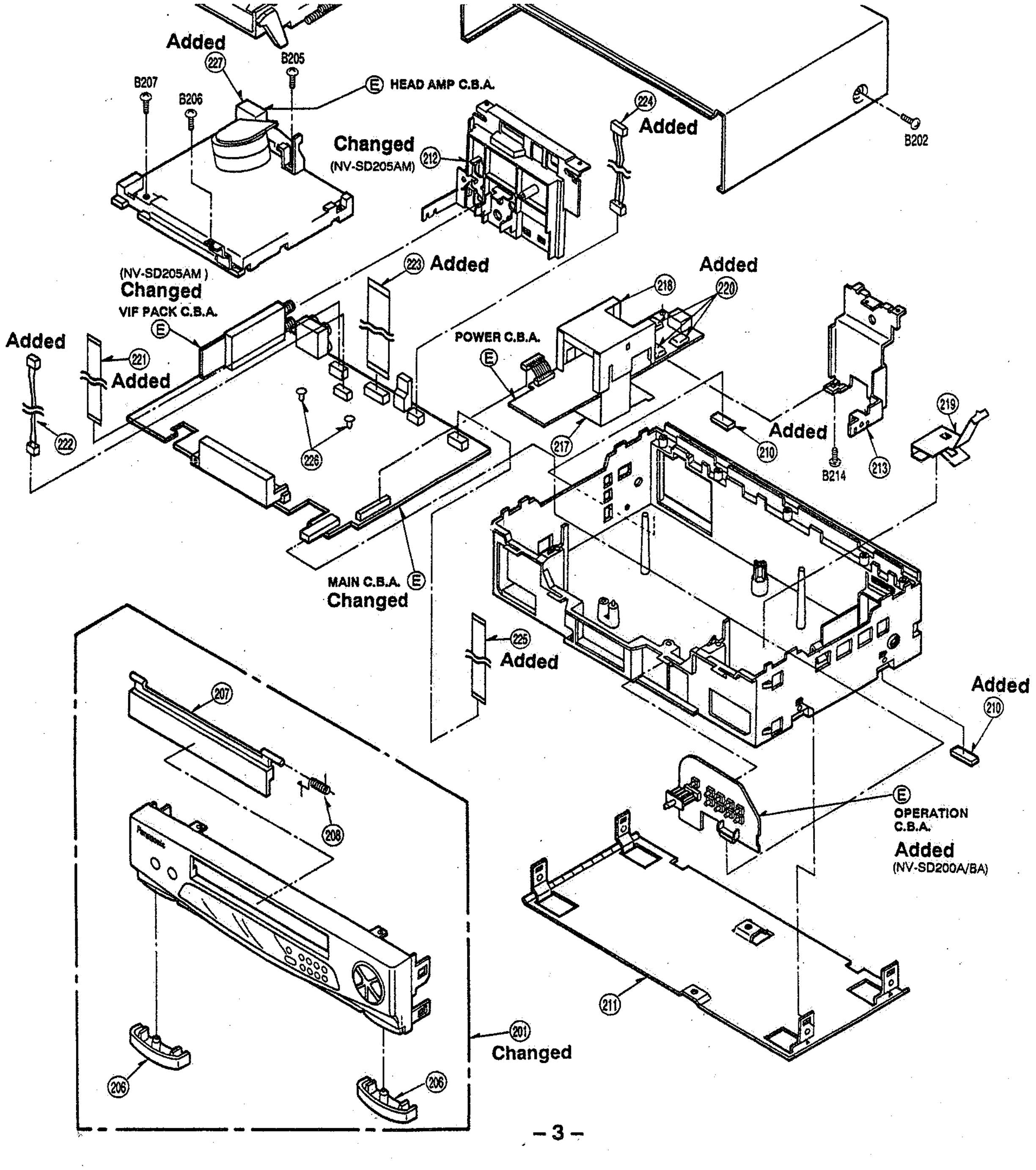
＊Refer to NV-SD200AM,NV-SD205A/EA/BA Service Manual (Page 5-1).

2. CHASSIS PARTS SECTION (2)

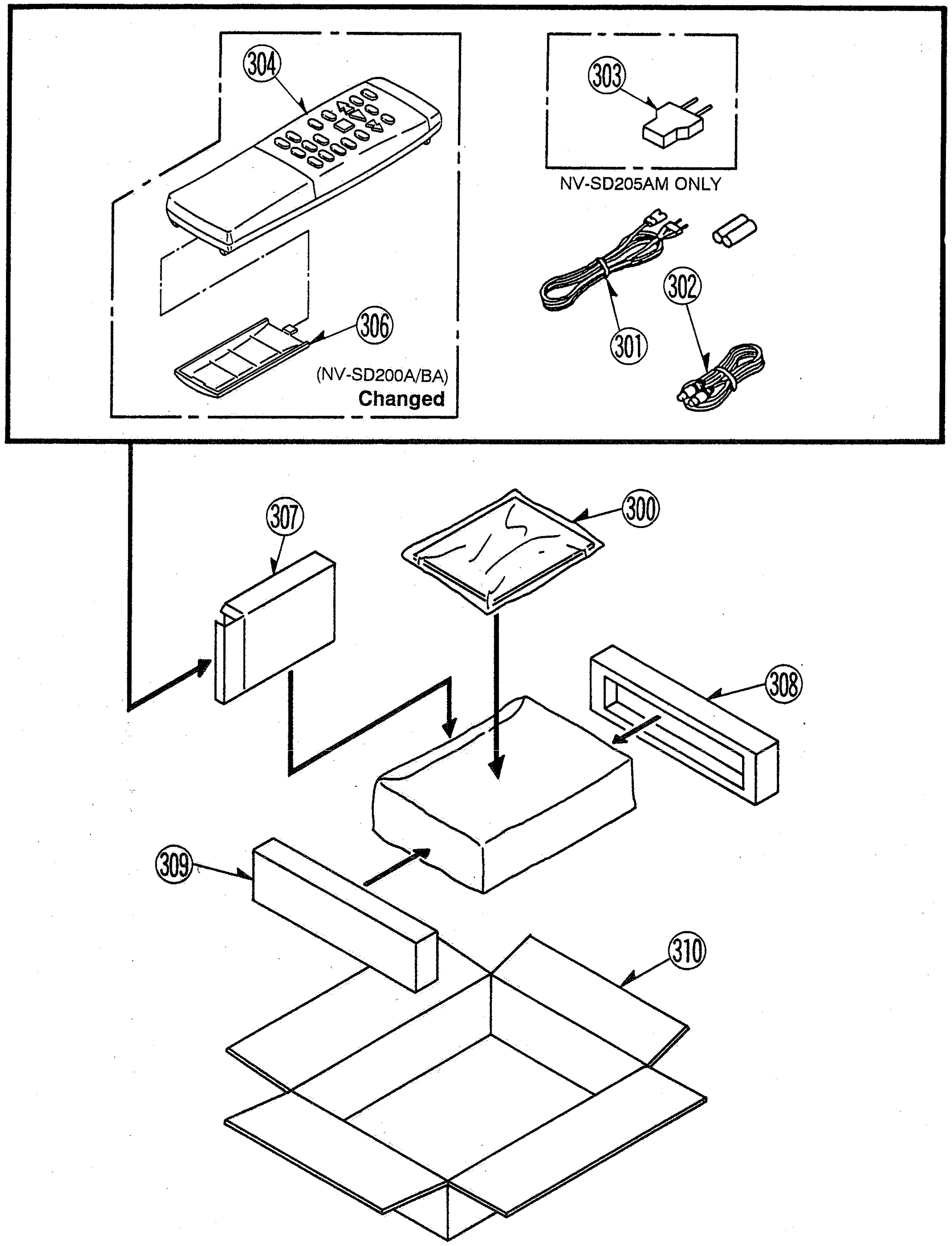
＊Refer to NV-SD200AM,NV-SD205A/EA/BA Service Manual (Page 5-3).


101
B102
129
104
105
145
140
127
128
Changed

3. CASING PARTS SECTION

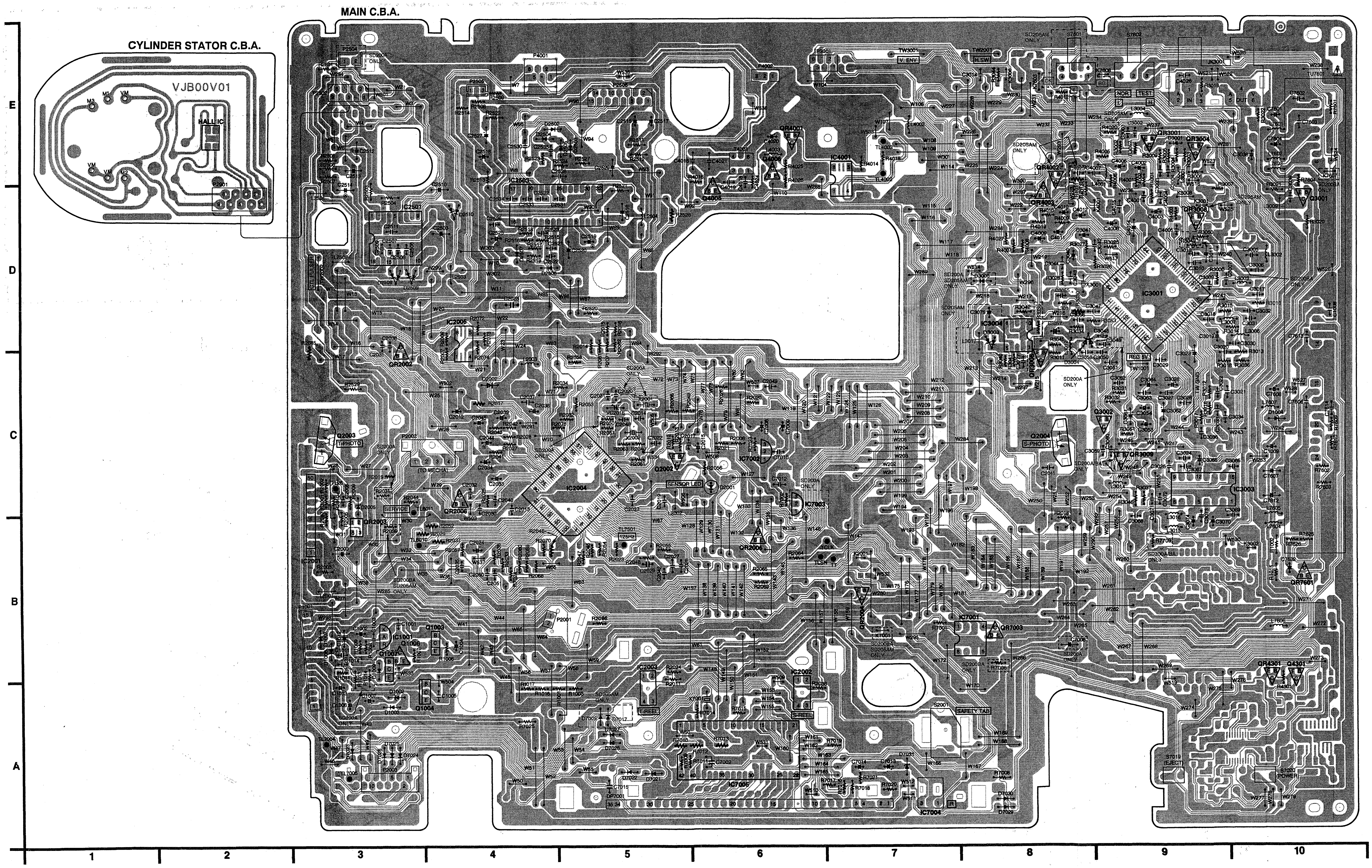

Added
227
B205
B207
B206
E HEAD AMP C.B.A.
Changed
(NV-SD205AM)
212
224
Added
B202
223 Added
Added
218
220
(NV-SD205AM)
Changed
VIF PACK C.B.A.
E
Added
221
Added
222
POWER C.B.A.
E
226
217
Added
210
B214
213
219
MAIN C.B.A. E
Changed
225
Added
Added
210
207
208
E
OPERATION C.B.A.
Added
(NV-SD200A/BA)
211
201
Changed
206
206

4. PACKING PARTS SECTION

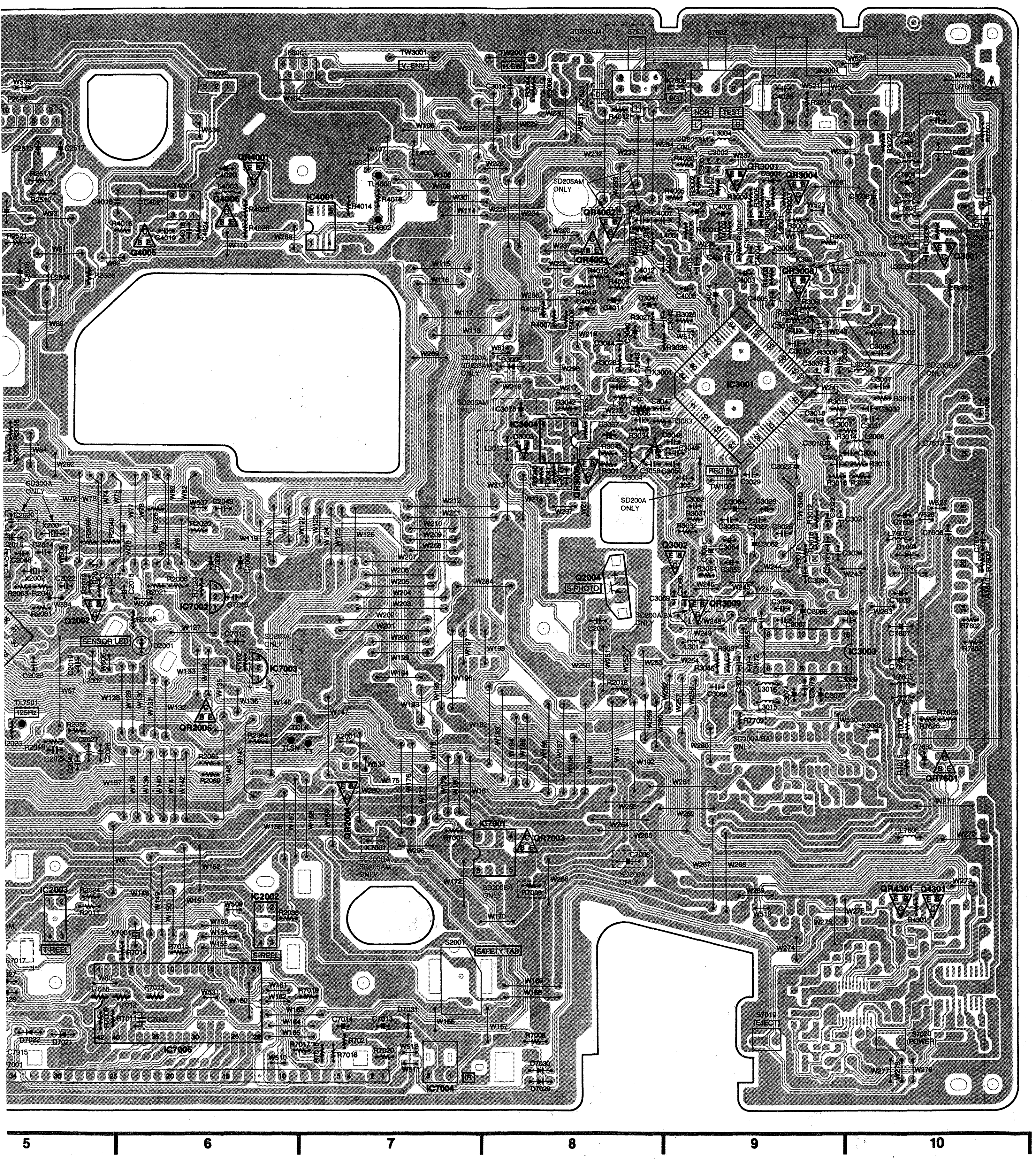

304
303
NV-SD205AM ONLY
302
301
306
(NV-SD200A/BA)
Changed
307
300
308
309
310

2. SCHEMATIC DIAGRAMS

2-1. MAIN C.B.A. (VEP06996H : NV-SD200A) (VEP06996J : NV-SD200BA) (VEP06996E : NV-SD205AM)


MAIN C.B.A.
CYLINDER STATOR C.B.A.
VJB00V01
HALL IC
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
IC2004
IC3001
IC2503
IC2501
IC2005
IC4001
IC3003
IC3004
IC7001
IC7002
IC7003
IC7004
IC7006
IC2002
IC2003
IC1001
P4001
P2002
P2001
P2003
T-PHOTO
S-PHOTO
SENSOR LED
SERVICE
SAFETY TAB
(TO MECHA)
S7019 (EJECT)
S7020 (POWER)
SD200A ONLY
SD205AM ONLY
SD200BA SD205AM ONLY

P06996E : NV-SD205AM)



IC3001
IC3003
IC3004
IC4001
IC7001
IC7002
IC7003
IC7004
IC7005
IC2002
IC2003
QR4001
QR4002
QR4003
QR3001
QR3004
QR3008
QR3009
QR2006
QR7003
QR7601
QR4301
Q4301
Q2004
Q2002
Q3002
Q4005
Q4006
SENSOR LED
S-PHOTO
T-REEL
S-REEL
SAFETY TAB
S7019 (EJECT)
S7020 (POWER)
REG 9V
TW1001
TW3001
TW2001
V. ENV
H. SW
SD200A ONLY
SD205AM ONLY
5
6
7
8
9
10

MAIN C. B. A.

Transistor	
Q1003	B-4
Q1004	A-3
Q1007	B-3
Q2002	C-5
Q2003	C-3
Q2004	C-8
Q3001	D-10
Q3002	C-9
Q4005	D-6
Q4006	E-6
Q4301	B-10

Transistor & Resistor	
QR2002	C-3
QR2003	B-3
QR2004	B-7
QR2005	B-6
QR2006	C-4
QR3001	E-9
QR3004	E-9
QR3005	C-8
QR3008	D-9
QR3009	C-9
QR4001	E-6
QR4002	E-8
QR4003	D-8
QR4301	B-10
QR7003	B-8
QR7601	B-10

Integrated Circuit	
IC1001	B-3
IC2001	B-3
IC2002	B-6
IC2003	B-5
IC2004	C-5
IC2005	D-4
IC2501	D-3
IC2503	D-4
IC3001	D-9
IC3003	C-10
IC3004	D-8
IC4001	E-7
IC7001	B-8
IC7002	C-6
IC7003	C-6
IC7004	A-7
IC7005	A-6

Test Land	
TL26	C-3
TL4002	E-7
TL4003	E-7
TL6010	B-3
TL6011	C-3
TL7004	A-3
TL7005	A-3
TL7501	B-5

Test Wire	
TW1001	C-9
TW2001	E-8
TW2002	D-3
TW3001	E-7
TW GND	C-9

Connector	
P1001	B-3
P2001	B-4
P2002	C-3
P2003	A-3
P2502	E-3
P2504	E-3
P2505	E-4
P2506	E-5
P3001	E-6
P4001	E-4
P4002	E-6

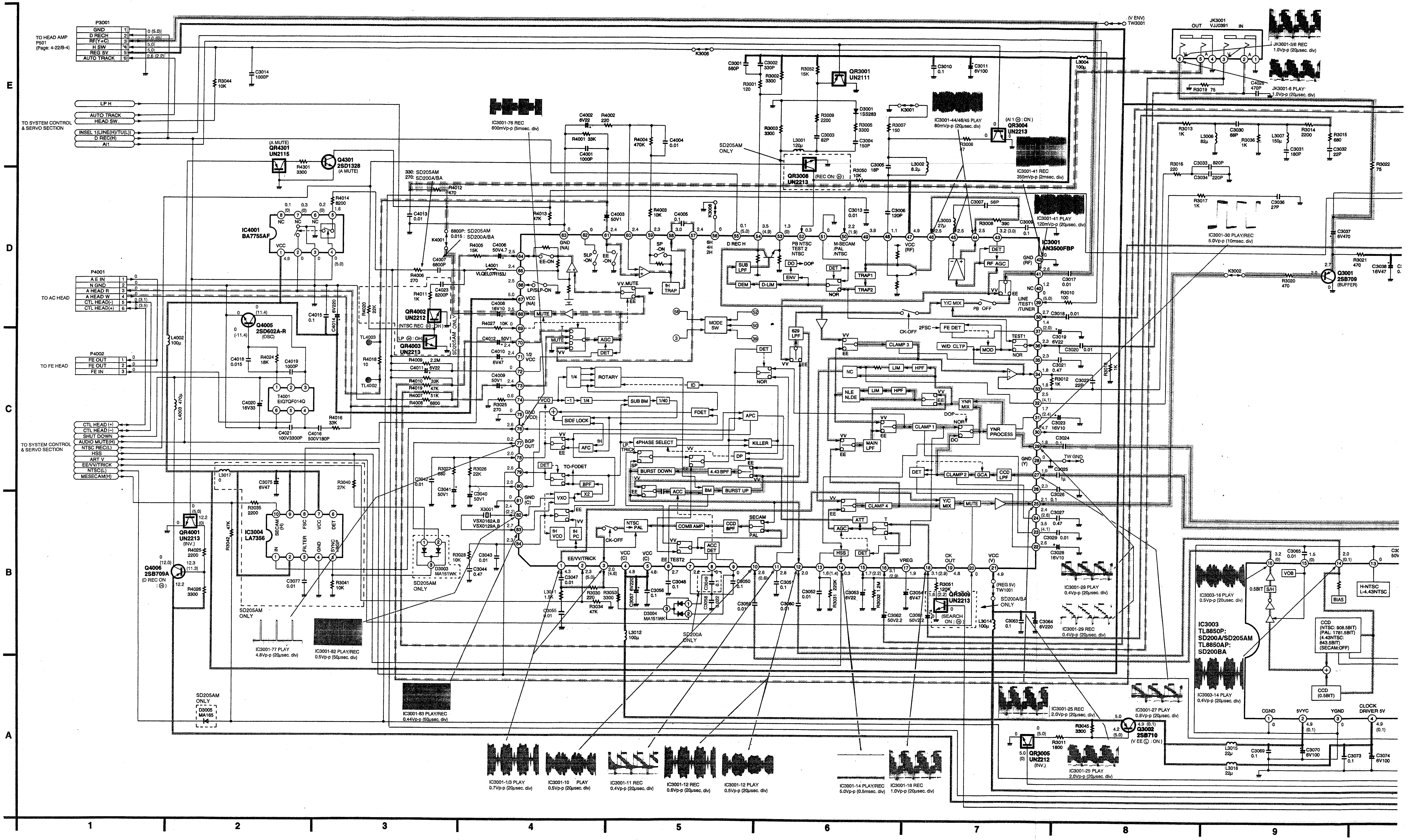
ADDRESS INFORMATION

IMPORTANT SAFETY NOTICE :
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

2-2. VIDEO / AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

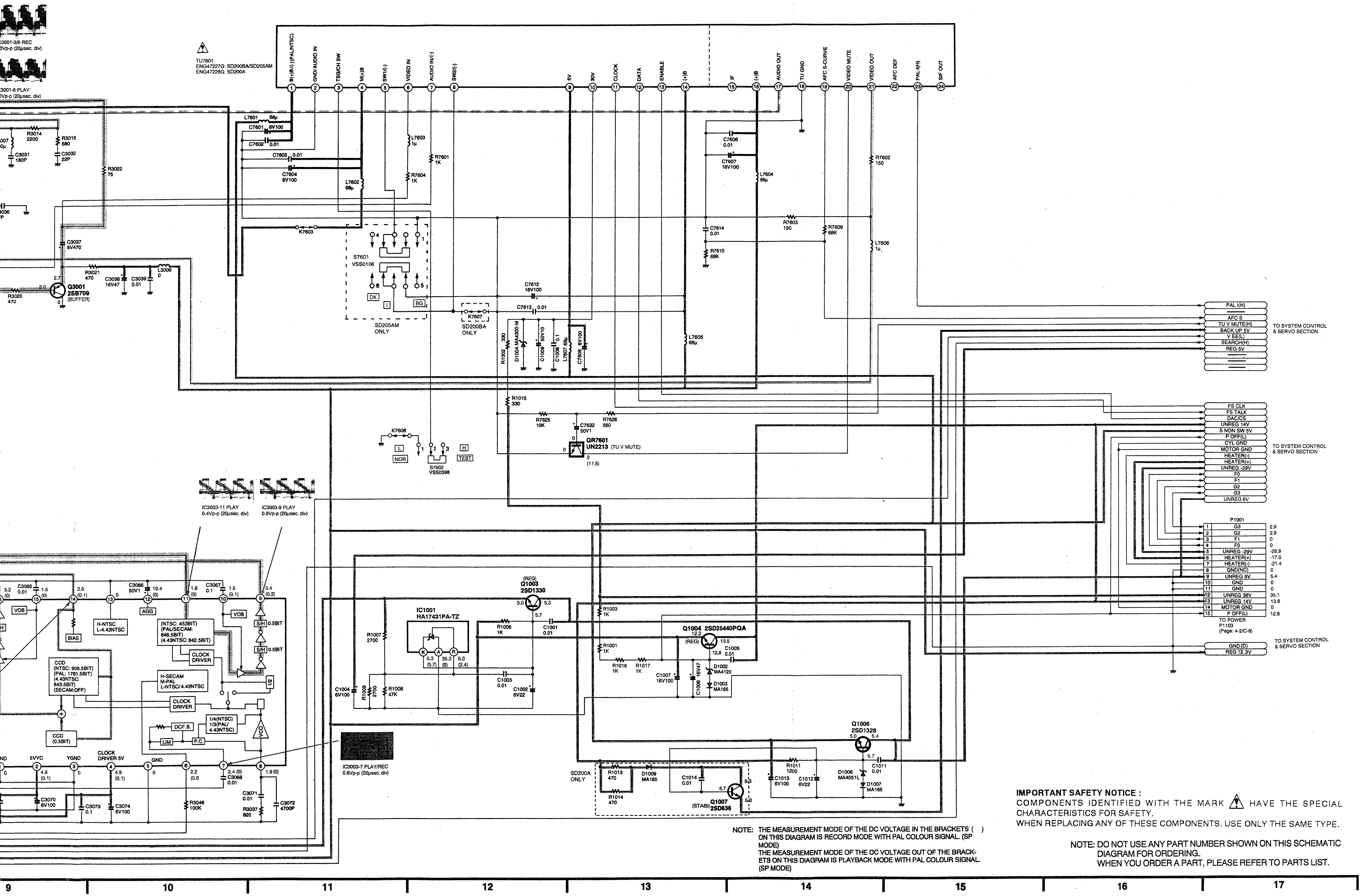


P3001
GND
D RECH
RF(Y+C)
H SW
REG 5V
AUTO TRACK
TO HEAD AMP P501 (Page: 4-22/B-4)
R3044 10K
C3014 1000P
LP H
AUTO TRACK
HEAD SW
INSEL 1(LINE(H)/TU(L))
D REC(H)
AI1
TO SYSTEM CONTROL & SERVO SECTION
(A MUTE) QR4301 UN2115
R4301 3300
Q4301 2SD1328 (A MUTE)
IC4001 BA7755AF
R4014 8200
P4001
A E IN
N GND
A HEAD R
A HEAD W
CTL HEAD(-)
CTL HEAD(+)
TO AC HEAD
Q4005 2SD602A-R (OSC)
L4002 100μ
C4015 0.1
C4014 6V220
R4024 18K
C4018 0.015
C4019 1000P
T4001 EIQ7QF014Q
C4020 16V33
C4021 100V3300P
C4016 500V180P
R4016 33K
P4002
FE OUT
FE IN
TO FE HEAD
L4003 470μ
CTL HEAD (+)
CTL HEAD (-)
SHUT DOWN
AUDIO MUTE(H)
NTSC REC(L)
HSS
ART V
EE/VV/TRICK
NTSC(L)
MESECAM(H)
QR4001 UN2213 (INV.)
R4025 2200
R4026 3300
Q4006 2SB709A (D REC ON)
L3017
C3075 6V47
R3035 2200
IC3004 LA7356
SECAM (H)
FSC
VCC
DET
IN
FILTER
GND
SYNC HSP
R3040 27K
R3042 47K
C3077 0.01
R3041 10K
SD205AM ONLY
D3005 MA165
IC3001-77 PLAY 4.8Vp-p (20μsec. div)
IC3001-82 PLAY/REC 0.5Vp-p (50μsec. div)
IC3001-83 PLAY/REC 0.44Vp-p (50μsec. div)
330: SD205AM 270: SD200A/BA
R4012 470
C4013 0.01
6800P: SD205AM 0.015: SD200A/BA
K4001
C4007 6800P
R4006 270
R4011 1K
C4023 8200P
QR4002 UN2212
(NTSC REC (L):OH)
QR4003 UN2213
LP (H):OH
R4020 22K
TL4003
TL4002
R4018 10
R4009 2.2M
C4011 6V22
R4010 33K
R4019 47K
R4007 51K
R4008 6800
R4005 15K
C4006 50V4.7
L4001 VLQEL07R153J
C4008 16V10
R4027 10K
C4012 50V1
C4010 6V47
C4009 50V1
R3025 270
R3027 680
R3026 22K
C3042 0.01
C3041 50V1
C3040 50V1
X3001 VSX0162A.B VSX0129A.B
R3028 10K
C3043 0.01
C3044 0.47
D3003 MA151WK
IC3001-78 REC 600mVp-p (5msec. div)
C4002 6V22
R4002 220
R4001 33K
C4001 1000P
R4004 470K
C4004 0.01
R4013 47K
C4003 50V1
R4003 10K
C4005 0.1
K3006
EE-ON
SLP-ON
LP/SLP-ON
VV.MUTE
MUTE
AGC
DET
1/4
ROTARY
VCO
SUB BM
1/40
SIDE LOCK
FDET
APC
AFC
4PHASE SELECT
KILLER
BURST DOWN
4.43 BPF
DP
ACC
BM
BURST UP
TO-FODET
BPF
X2
VXO
NTSC→PAL
COMB AMP
CCD BPF
SECAM
PAL
ACC DET
1H VCO
1H PC
CK-OFF
EE/VV/TRICK
VCC (C)
EE TEST2
SD205AM ONLY
MODE SW
ID
629 LPF
NOR
SUB LPF
DEM
D-LIM
DO-DOP
ENV
PB NTSC TEST 2 NTSC
M-SECAM /PAL /NTSC
TRAP1
TRAP2
FE DET
W/D CLTP
MOD
CLAMP 3
NC
LIM
HPF
NLE NLDE
YNR MIX
DOP
CLAMP 1
MAIN LPF
YNR PROCESS
CLAMP 2
GCA
CCD LPF
CLAMP 4
Y/C MIX
ATT
HSS
VREG
CK OUT
VCC (V)
IC3001 AN3500FBP
D REC H
6H 4H 2H
VCC (RF)
GND (RF)
RF AGC
LINE /TEST1 /TUNER
PB OFF
TEST1
GND (Y)
TW GND
C3001 560P
C3002 330P
R3002 3300
R3001 120
R3052 15K
QR3001 UN2111
R3009 2200
C3003 82P
D3001 1SS283
R3005 3300
C3004 150P
R3003 3300
L3001 120μ
R3007 150
K3001
SD205AM ONLY
QR3008 UN2213
(REC ON: (H))
R3050 10K
C3005 18P
L3002 8.2μ
C3010 0.1
C3011 6V100
IC3001-44/46/45 PLAY 80mVp-p (20μsec. div)
(AI 1 (H): ON) QR3004 UN2213
R3006 47
IC3001-41 REC 350mVp-p (2msec. div)
C3013 0.01
C3006 120P
L3003 27μ
C3007 56P
R3008 390
C3009 0.1
IC3001-41 PLAY 120mVp-p (20μsec. div)
L3004 100μ
C3017 0.01
R3010 100
C3018 0.01
C3019 6V22
C3020 0.01
R3018 1K
C3021 0.47
R3012 1K
C3022 22P
C3023 16V10
C3024 0.1
C3025 1μ
C3026 0.1
C3027 0.47
C3029 0.01
C3028 16V10
IC3001-29 PLAY 0.4Vp-p (20μsec. div)
IC3001-29 REC 0.4Vp-p (20μsec. div)
C3047 0.01
L3011 1.5K
R3030 220
R3034 47K
R3053 3300
C3055 0.01
C3057 6V220
C3056 0.1
C3048 0.1
D3004 MA151WK
C3049 0.1
C3058 0.022
C3050 0.1
C3059 0.01
L3012 100μ
SD200A ONLY
C3051 0.1
C3060 0.01
C3052 0.01
R3031 220K
C3053 6V22
R3032 1.2M
C3062 50V2.2
C3054 6V47
C3061 50V2.2
R3051 120K
QR3009 UN2213
(SEARCH ON: (H))
(REG 5V) TW1001
SD200A/BA ONLY
L3014 100μ
C3063 0.1
C3064 6V220
IC3001-1/3 PLAY 0.7Vp-p (20μsec. div)
IC3001-10 PLAY 0.5Vp-p (20μsec. div)
IC3001-11 REC 0.4Vp-p (20μsec. div)
IC3001-12 REC 0.6Vp-p (20μsec. div)
IC3001-12 PLAY 0.5Vp-p (20μsec. div)
IC3001-14 PLAY/REC 5.0Vp-p (0.5msec. div)
IC3001-18 REC 1.0Vp-p (20μsec. div)
IC3001-25 REC 2.0Vp-p (20μsec. div)
IC3001-25 PLAY 2.0Vp-p (20μsec. div)
IC3001-27 PLAY 0.8Vp-p (20μsec. div)
R3045 3300
R3011 1800
QR3005 UN2212 (INV.)
Q3002 2SB710 (V EE (L): ON)
(V ENV) TW3001
JK3001 VJJ0391
OUT
IN
JK3001-3/8 REC 1.0Vp-p (20μsec. div)
JK3001-6 PLAY 1.0Vp-p (20μsec. div)
C4026 470P
R3019 75
R3013 1K
L3006 82μ
C3030 68P
R3036 1K
L3007 150μ
R3014 2200
C3031 180P
R3015 680
C3032 22P
R3016 220
C3033 820P
C3034 220P
R3022 75
R3017 1K
C3036 27P
IC3001-30 PLAY/REC 5.0Vp-p (10msec. div)
C3037 6V470
K3002
R3020 470
Q3001 2SB709 (BUFFER)
R3021 470
C3038 16V47
C3065 0.01
VOB
S/H
0.5BIT
BIAS
H-NTSC L-4.43NTSC
IC3003-16 PLAY 0.5Vp-p (20μsec. div)
IC3003 TL8850P: SD200A/SD205AM TL8850AP: SD200BA
CCD (NTSC: 908.5BIT) (PAL: 1781.5BIT) (4.43NTSC: 843.5BIT) (SECAM:OFF)
CCD (0.5BIT)
IC3003-14 PLAY 0.4Vp-p (20μsec. div)
CGND
5VYC
YGND
CLOCK DRIVER 5V
L3015 22μ
C3069 0.1
C3070 6V100
C3073 0.1
C3074 6V100
L3016 22μ
E
D
C
B
A
1
2
3
4
5
6
7
8
9

K MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

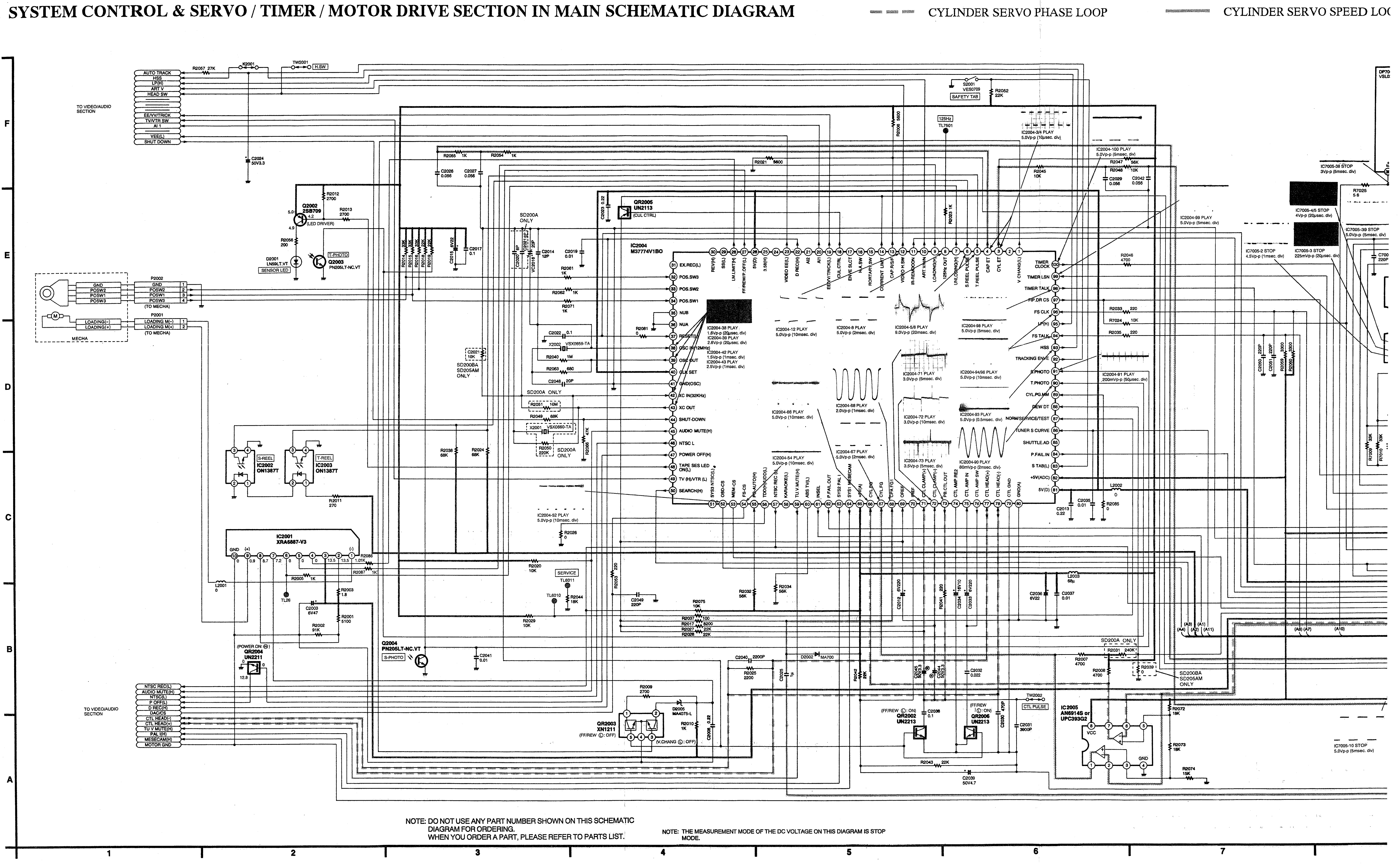

IC3001-3/6 REC
IC3001-6 PLAY
TU7601
ENG47227G: SD200BA/SD205AM
ENG47228G: SD200A
B(+)/B(-)/(PAL/NTSC)
GND/AUDIO IN
TS9/CH SW
M(+)B
SW1(-)
VIDEO IN
AUDIO IN(-)
SW2(-)
5V
30V
CLOCK
DATA
ENABLE
(+)B
IF
(+)B
AUDIO OUT
TU GND
AFC S-CURVE
VIDEO MUTE
VIDEO OUT
AFC DEF
PAL-I(H)
SIF OUT
R3014 2200
R3015 680
C3031 180P
C3032 22P
R3022 75
C3037 6V470
R3021 470
C3038 16V47
C3039 0.01
L3009
Q3001 2SB709 (BUFFER)
R3020 470
L7601 68µ
C7601 6V100
C7602 0.01
C7603 0.01
C7604 6V100
L7602 68µ
L7603 1µ
R7601 1K
R7604 1K
K7603
S7601 VSS0106
DK
I
BG
SD205AM ONLY
C7612 16V100
C7613 0.01
K7607
SD200BA ONLY
R1002 330
D1004 MA4300-M
C1009 50V10
C1008 0.1
L7607 68µ
C7608 6V100
C7606 0.01
C7607 16V100
L7604 68µ
C7614 0.01
R7610 68K
R7603 150
R7609 68K
R7602 150
L7606 1µ
L7605 68µ
R1015 330
R7625 10K
C7632 50V1
R7626 560
QR7601 UN2213 (TU V MUTE)
K7608
L
NOR
S7602 VSS0398
H
TEST
PAL I(H)
AFC S
TU V MUTE(H)
BACK UP 5V
V EE(L)
SEARCH(H)
REG 5V
TO SYSTEM CONTROL & SERVO SECTION
FS CLK
FS TALK
DAC/CS
UNREG 14V
S NON SW 5V
P OFF(L)
CYL GND
MOTOR GND
HEATER(-)
HEATER(+)
UNREG -29V
F0
F1
G2
G3
UNREG 6V
TO SYSTEM CONTROL & SERVO SECTION
IC3003-11 PLAY 0.4Vp-p (20µsec. div)
IC3003-9 PLAY 0.8Vp-p (20µsec. div)
C3065 0.01
VOB
H-NTSC L-4.43NTSC
BIAS
AGG
(NTSC: 453BIT) (PAL/SECAM: 848.5BIT) (4.43NTSC: 842.5BIT)
CLOCK DRIVER
S/H 0.5BIT
CCD (NTSC: 908.5BIT) (PAL: 1781.5BIT) (4.43NTSC: 843.5BIT) (SECAM:OFF)
H-SECAM M-PAL L-NTSC/4.43NTSC
CLOCK DRIVER
1/4(NTSC) 1/3(PAL/4.43NTSC)
DCF.B.
LIM
P.C.
VCO
CCD (0.5BIT)
5VYC
YGND
CLOCK DRIVER 5V
GND
C3068 0.01
C3070 6V100
C3073 0.1
C3074 6V100
R3046 100K
C3071 0.01
R3037 820
C3072 4700P
IC3003-7 PLAY/REC 0.6Vp-p (20µsec. div)
IC1001 HA17431PA-TZ
(REG) Q1003 2SD1330
R1007 2700
R1006 1K
C1001 0.01
C1003 0.01
C1002 6V22
C1004 6V100
R1009 2700
R1008 47K
R1003 1K
R1001 1K
Q1004 2SD2544OPQA
(REG)
C1005 0.01
R1016 1K
R1017 1K
C1007 16V100
C1006 16V47
D1002 MA4120
D1003 MA165
Q1006 2SD1328
SD200A ONLY
R1013 470
D1009 MA165
C1014 0.01
R1014 470
Q1007 (STAB) 2SD636
R1011 1200
C1013 6V100
C1012 6V22
D1006 MA4051L
C1011 0.01
D1007 MA165
P1001
G3
G2
F1
F0
UNREG -29V
HEATER(+)
HEATER(-)
GND(NC)
UNREG 6V
GND
GND
UNREG 36V
UNREG 14V
MOTOR GND
P OFF(L)
TO POWER P1103 (Page: 4-2/C-8)
GND(D)
REG 12.3V
TO SYSTEM CONTROL & SERVO SECTION
9
10
11
12
13
14
15
16
17

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

IMPORTANT SAFETY NOTICE :
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

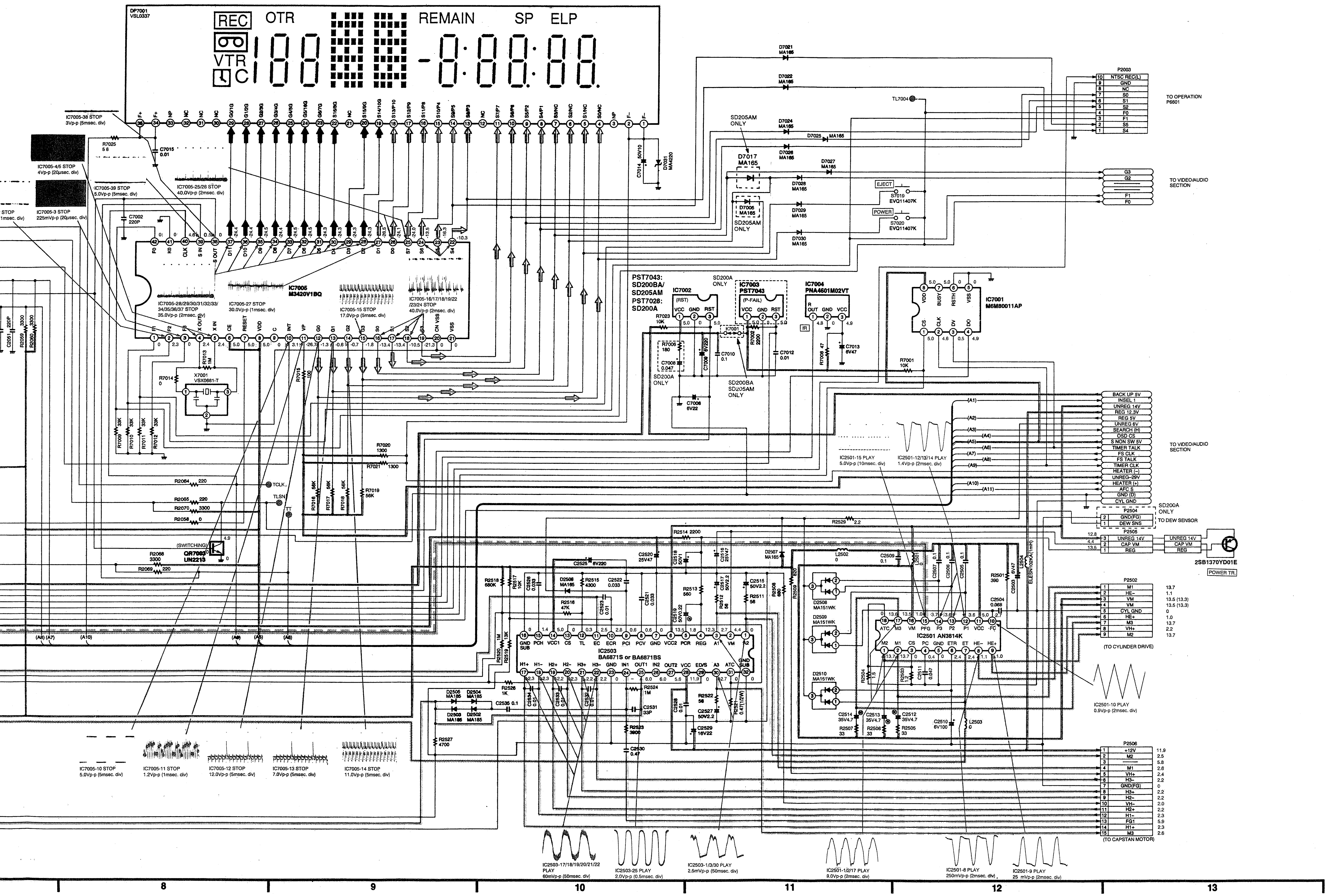
2-3. SYSTEM CONTROL & SERVO / TIMER / MOTOR DRIVE SECTION IN MAIN SCHEMATIC DIAGRAM


CYLINDER SERVO PHASE LOOP
CYLINDER SERVO SPEED LO
TO VIDEO/AUDIO SECTION
AUTO TRACK
HSS
LP(H)
ART V
HEAD SW
EE/VV/TRICK
TV/VTR SW
AI 1
VEE(L)
SHUT DOWN
K2001
TW2001
H.SW
S2001 VES0709
SAFETY TAB
125Hz
TL7501
Q2002 2SB709
(LED DRIVER)
D2001 LN59LT.VT
SENSOR LED
T-PHOTO
Q2003 PN205LT-NC.VT
P2002
GND
POSW2
POSW1
POSW3
(TO MECHA)
P2001
LOADING(−)
LOADING(+)
LOADING M(−)
LOADING M(+)
MECHA
QR2005 UN2113
(CUL CTRL)
IC2004 M37774V1BO
SD200A ONLY
SD200BA SD205AM ONLY
X2002 VSX0659-TA
X2001 VSX0660-TA
S-REEL
IC2002 ON1387T
T-REEL
IC2003 ON1387T
IC2001 XRA6887-V3
SERVICE
TL6011
TL6010
TL26
(POWER ON: H)
QR2004 UN2211
Q2004 PN205LT-NC.VT
S-PHOTO
NTSC REC(L)
AUDIO MUTE(H)
NTSC(L)
P OFF(L)
D REC(H)
DAC/CS
CTL HEAD(−)
CTL HEAD(+)
TU V MUTE(H)
PAL I(H)
MESECAM(H)
MOTOR GND
QR2003 XN1211
(FF/REW L: OFF)
(V.CHANG L: OFF)
D2005 MA4075-L
D2002 MA700
QR2002 UN2213
QR2006 UN2213
TW2002
CTL PULSE
IC2005 AN6914S or UPC393G2
IC7005-10 STOP 5.0Vp-p (5msec. div)
A
B
C
D
E
F
1
2
3
4
5
6
7

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

DER SERVO SPEED LOOP CAPSTAN SERVO PHASE LOOP CAPSTAN SERVO SPEED LOOP ⇦ SERMENT CONTROL SIGNAL PATH ⬅ GRID CONTROL SIGNAL PATH



DP7001
VSL0337
REC
OTR
REMAIN
SP
ELP
VTR
IC7005
M3420V1BQ
IC7002
(RST)
IC7003
PST7043
(P-FAIL)
IC7004
PNA4601M02VT
IC7001
M6M80011AP
PST7043:
SD200BA/
SD205AM
PST7028:
SD200A
SD200A ONLY
SD205AM ONLY
SD200BA
SD205AM
ONLY
X7001
VSX0661-T
QR7003
UN2213
(SWITCHING)
TCLK
TLSN
TT
TL7004
D7021 MA165
D7022 MA165
D7024 MA165
D7025 MA165
D7026 MA165
D7027 MA165
D7028 MA165
D7029 MA165
D7030 MA165
D7017 MA165
D7006 MA165
D7031 MA4220
EJECT
S7019 EVQ11407K
POWER
S7020 EVQ11407K
P2003
NTSC REC(L)
GND
NC
S0
S1
S2
F0
F1
S5
S4
TO OPERATION P6601
G3
G2
F1
F0
TO VIDEO/AUDIO SECTION
BACK UP 5V
INSEL 1
UNREG 14V
REG 12.3V
REG 5V
UNREG 6V
SEARCH (H)
OSD CS
S NON SW 5V
TIMER TALK
FS CLK
FS TALK
TIMER CLK
HEATER (–)
UNREG–29V
HEATER (+)
AFC S
GND (D)
CYL GND
TO VIDEO/AUDIO SECTION
SD200A ONLY
P2504
GND(FG)
DEW SNS
TO DEW SENSOR
P2505
UNREG 14V
CAP VM
REG
2SB1370YD01E
POWER TR.
P2502
M1
HE–
VM
VM
CYL GND
HE+
M3
VH+
M2
(TO CYLINDER DRIVE)
IC2503
BA6871S or BA6571BS
IC2501 AN3814K
D2508 MA151WK
D2509 MA151WK
D2510 MA151WK
D2505 MA185
D2504 MA185
D2503 MA185
D2502 MA185
D2506 MA165
D2507 MA165
P2506
+12V
M2
M1
VH+
H3–
GND(FG)
H3+
H2–
VH–
H2+
H1–
FG1
H1+
M3
(TO CAPSTAN MOTOR)
IC7005-38 STOP 3Vp-p (5msec. div)
IC7005-4/5 STOP 4Vp-p (20µsec. div)
IC7005-39 STOP 5.0Vp-p (5msec. div)
IC7005-25/26 STOP 40.0Vp-p (2msec. div)
IC7005-3 STOP 225mVp-p (20µsec. div)
IC7005-28/29/30/31/32/33/34/35/36/37 STOP 35.0Vp-p (2msec. div)
IC7005-27 STOP 30.0Vp-p (1msec. div)
IC7005-15 STOP 17.0Vp-p (5msec. div)
IC7005-16/17/18/19/22/23/24 STOP 40.0Vp-p (2msec. div)
IC7005-10 STOP 5.0Vp-p (5msec. div)
IC7005-11 STOP 1.2Vp-p (1msec. div)
IC7005-12 STOP 12.0Vp-p (5msec. div)
IC7005-13 STOP 7.0Vp-p (5msec. div)
IC7005-14 STOP 11.0Vp-p (5msec. div)
IC2501-15 PLAY 5.0Vp-p (10msec. div)
IC2501-12/13/14 PLAY 1.4Vp-p (2msec. div)
IC2501-10 PLAY 0.9Vp-p (2msec. div)
IC2503-17/18/19/20/21/22 PLAY 60mVp-p (50msec. div)
IC2503-25 PLAY 2.0Vp-p (0.5msec. div)
IC2503-1/3/30 PLAY 2.5mVp-p (50msec. div)
IC2501-1/2/17 PLAY 9.0Vp-p (2msec. div)
IC2501-8 PLAY 250mVp-p (2msec. div)
IC2501-9 PLAY 25 mVp-p (2msec. div)
8
9
10
11
12
13

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2005										IC2002									
MODE	1	2	3	4	5	6	7	8			1	2	3	4						
STOP	3.6	1.3	1.4	0	3.2	1.3	4.9	5.0			1.1	0	0	0						
PLAY	3.4	1.1	1.4	0	3.2	1.0	4.9	5.0			1.1	0	5.0	0						
REC	3.2	1.3	1.4	0	3.2	1.3	4.9	5.0			1.1	0	0	0						
F.F.	3.6	1.0	1.4	0	3.2	1.2	4.9	5.0			1.1	0	2.1	0						
REW	3.0	1.0	1.4	0	3.2	1.2	4.9	5.0			1.1	0	3.0	0						

REF. NO.	IC2003																			
MODE	1	2	3	4																
STOP	2.2	1.1	0	0																
PLAY	2.2	1.1	5.0	0																
REC	2.2	1.1	0	0																
F.F.	2.2	1.1	4.6	0																
REW	2.2	1.1	2.5	0																

REF. NO.	IC2004																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.0	0	2.4	2.4	5.0	5.0	0	2.6	0	0	4.9	5.0	2.4	0	0	0	0	2.4	5.0	0
PLAY	5.0	0	2.4	2.4	5.0	5.0	0	1.1	0	0	4.9	4.2	0	1.1	0	0	0	4.4	2.3	0
REC	5.0	0	2.4	2.4	5.0	5.0	0	2.6	0	0	4.9	5.0	0	5.0	0	0	0	4.4	5.0	0
F.F.	0	0	2.4	2.1	1.8	3.0	0	2.6	0	0	4.9	4.0	0	5.0	0	0	0	4.4	5.0	0
REW	0	0	2.4	2.1	3.4	3.0	0	2.6	0	0	4.9	5.0	4.9	5.0	0	0	0	4.4	5.0	0

REF. NO.	IC2004																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	0	5.0	5.0	0	5.0	0	0	5.0	0	0	0	0	5.0	2.3	2.2	5.0
PLAY	0	0	5.0	0	0	5.0	5.0	0	0.9	0	0	5.0	0	0	0	0	5.0	—	—	5.0
REC	0	5.0	0	0	0	5.0	5.0	0	5.0	0	5.0	5.0	0	0	0	0	5.0	—	—	5.0
F.F.	0	0	0	0	0	5.0	0	0	5.0	0	0	5.0	5.0	0	0	0	5.0	—	—	5.0
REW	0	0	0	0	0	5.0	0	0	5.0	5.0	0	5.0	5.0	0	0	0	5.0	—	—	5.0

REF. NO.	IC2004																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	2.1	1.2	3.2	5.0	5.0	0	5.0	0	0	0	4.8	5.0	0.1	4.9	0	4.9	0	0	4.9
PLAY	0	0	1.2	0	0	5.0	0	0	0	0	0	4.4	5.0	0.1	4.9	0	4.9	0	5.0	4.9
REC	0	1.9	1.2	4.5	0	5.0	0	0	0	0	0	5.0	5.0	0.1	4.9	0	4.9	0	5.0	4.9
F.F.	0	1.0	1.2	0	5.0	5.0	0	0	0	0	0	3.8	5.0	0	4.9	0	4.9	0	0	4.9
REW	0	1.0	1.2	0	5.0	5.0	0	0	0	0	0	4.2	5.0	0	4.9	0	4.9	0	0	4.9

REF. NO.	IC2004																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	5.0	0	5.0	4.9	4.9	3.6	2.4	2.4	2.4	2.5	2.3	2.4	2.4	2.4	0	0	0	0	0.6
PLAY	5.0	5.0	0	0	4.9	4.9	3.6	2.4	2.4	2.4	2.5	2.5	2.4	2.4	2.4	0	0	0	0	0
REC	5.0	5.0	0	0	4.9	4.9	3.6	2.4	2.4	2.4	2.5	2.3	2.4	2.4	2.4	0	3.5	2.7	0	0
F.F.	0	5.0	0	5.0	4.9	4.9	3.6	2.4	2.4	2.4	1.2	3.7	2.4	2.4	2.4	0	0	0	0	0
REW	0	5.0	0	5.0	4.9	4.9	3.6	2.4	2.4	2.4	1.2	3.7	2.4	2.4	2.4	0	0	0	0	0

REF. NO.	IC2004																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	5.0	5.0	5.0	5.0	0	2.5	0.5	0	0	4.4	4.9	2.2	0.7	5.0	0	5.0	3.2	0.4	4.9	4.7
PLAY	5.0	5.0	5.0	5.0	0	2.3	5.0	0	0	4.1	4.9	2.4	0.3	5.0	0	5.0	3.2	0.7	4.9	4.7
REC	5.0	5.0	0	5.0	0	2.5	5.0	0	0	4.0	4.9	2.2	0.3	5.0	0	5.0	3.2	07	4.9	4.6
F.F.	5.0	5.0	5.0	5.0	0	2.5	5.0	0	0	4.4	4.9	2.1	0.7	5.0	0	5.0	3.2	1.8	4.9	4.3
REW	5.0	5.0	5.0	5.0	0	2.5	5.0	0	0	4.4	4.9	2.7	0.7	5.0	0	5.0	3.2	1.8	4.9	4.5

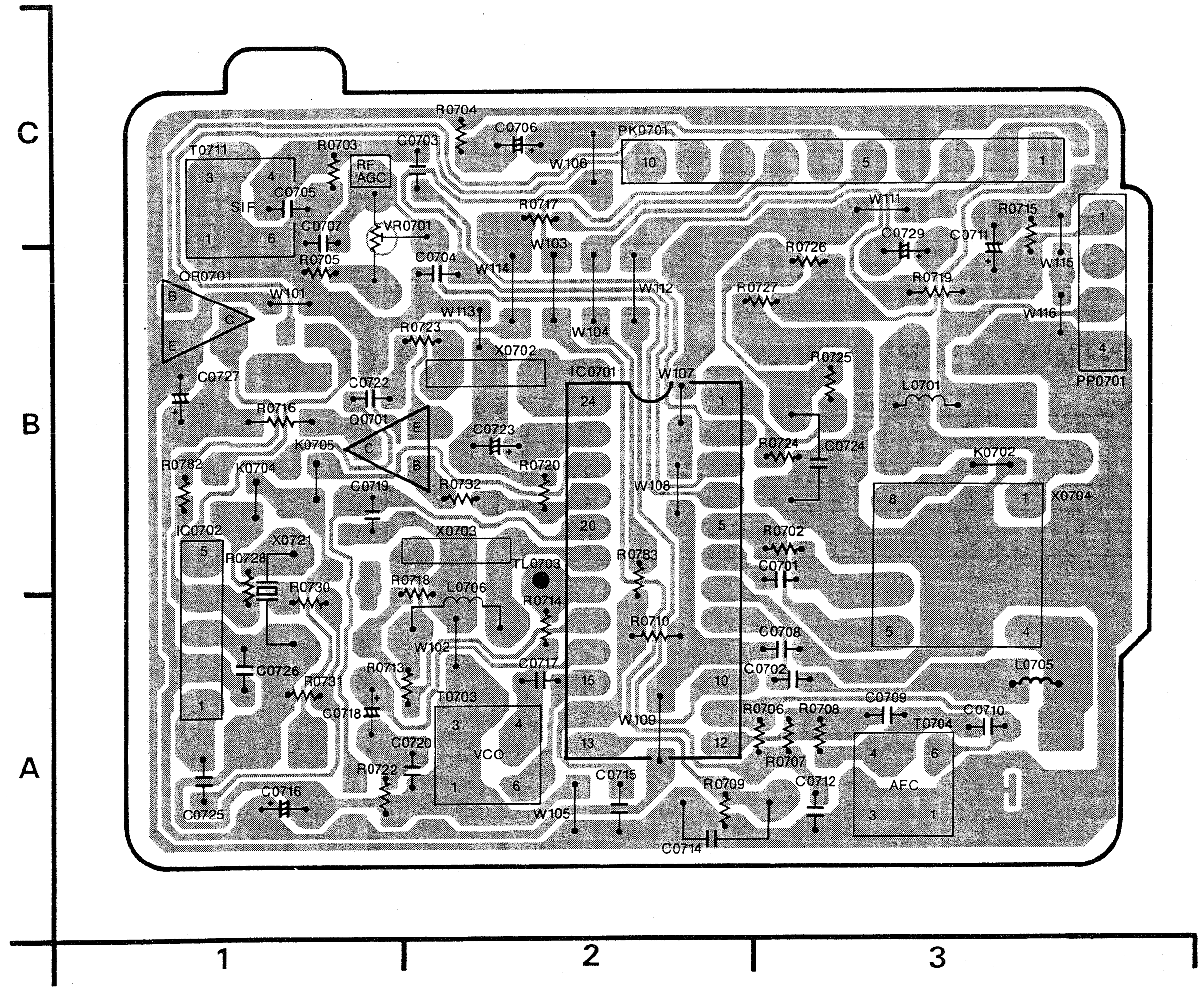
SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	QR2002			QR2003						QR2005			QR2006		
MODE	E	C	B	1	2	3	4	5		E	C	B	E	C	B
STOP	0	0	5.0	0	0	5.0	0	5.0		2.4	0	2.4	0	0	5.0
PLAY	0	0	5.0	0	0	5.0	0	5.0		2.4	5.0	4.4	0	0	5.0
REC	0	0	5.0	0	0	5.0	0	5.0		2.4	5.0	4.4	0	0	5.0
F.F.	0	1.2	0	13.3	7.2	0	0	0		2.4	5.0	4.4	0	0.4	0
REW	0	1.3	0	13.3	7.2	0	0	0		2.4	5.0	4.4	0	1.6	0

2-4. VIF PACK C.B.A. (VEP07801L : NV-SD205AM)

VIF PACK C.B.A.			
Transistor		Test Land	
Q0701	B-1	TL0703	B-2
Transistor & Resistor		Adjustment	
QR0701	B-1	VR0701	C-1
Integrated Circuit		Connector	
IC0701 IC0702	B-2 B-1	PK0701 PP0701	C-3 B-3

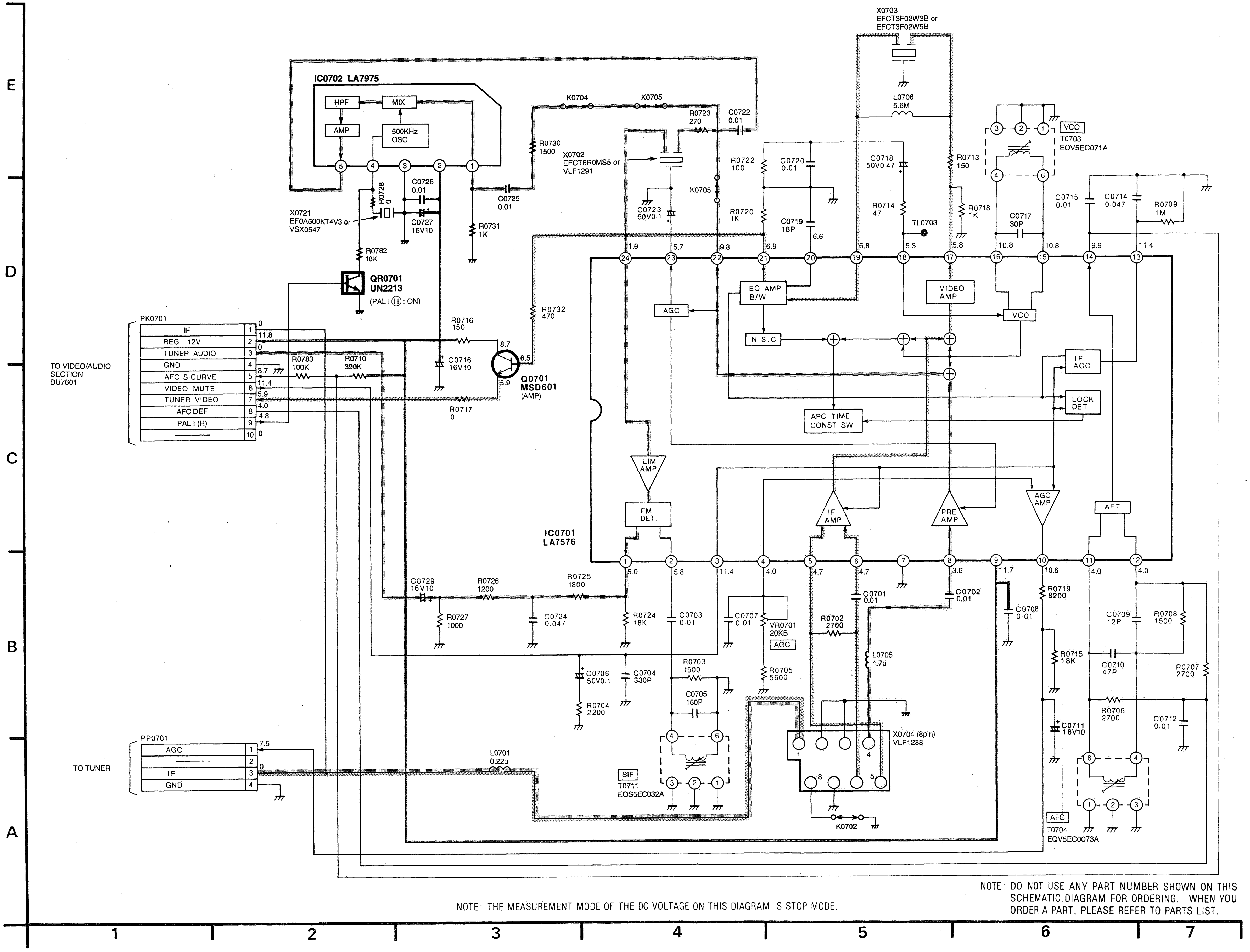
ADDRESS INFORMATION


C
B
A
1
2
3
T0711
SIF
R0703
C0705
C0707
R0705
RF AGC
VR0701
C0703
R0704
C0706
W106
PK0701
10
5
1
R0717
W103
C0704
W114
QR0701
W101
W113
R0723
X0702
W104
W112
IC0701
24
20
15
13
12
10
5
1
W107
W111
R0715
C0729
C0711
R0726
R0719
R0727
W115
W116
PP0701
R0725
L0701
C0727
R0716
C0722
Q0701
K0705
C0723
R0720
R0732
R0782
K0704
C0719
IC0702
X0721
R0728
R0730
X0703
TL0703
R0718
L0706
R0714
W108
R0783
R0724
C0724
K0702
X0704
R0702
C0701
R0710
C0708
C0702
L0705
C0726
R0731
R0713
W102
C0717
T0703
VCO
C0718
C0720
R0722
W109
R0706
R0708
R0707
C0709
T0704
C0710
AFC
C0715
R0709
C0712
C0714
W105
C0716
C0725

2-5. VIF PACK SCHEMATIC DIAGRAM (NV-SD205AM)

VIDEO SIGNAL PATH

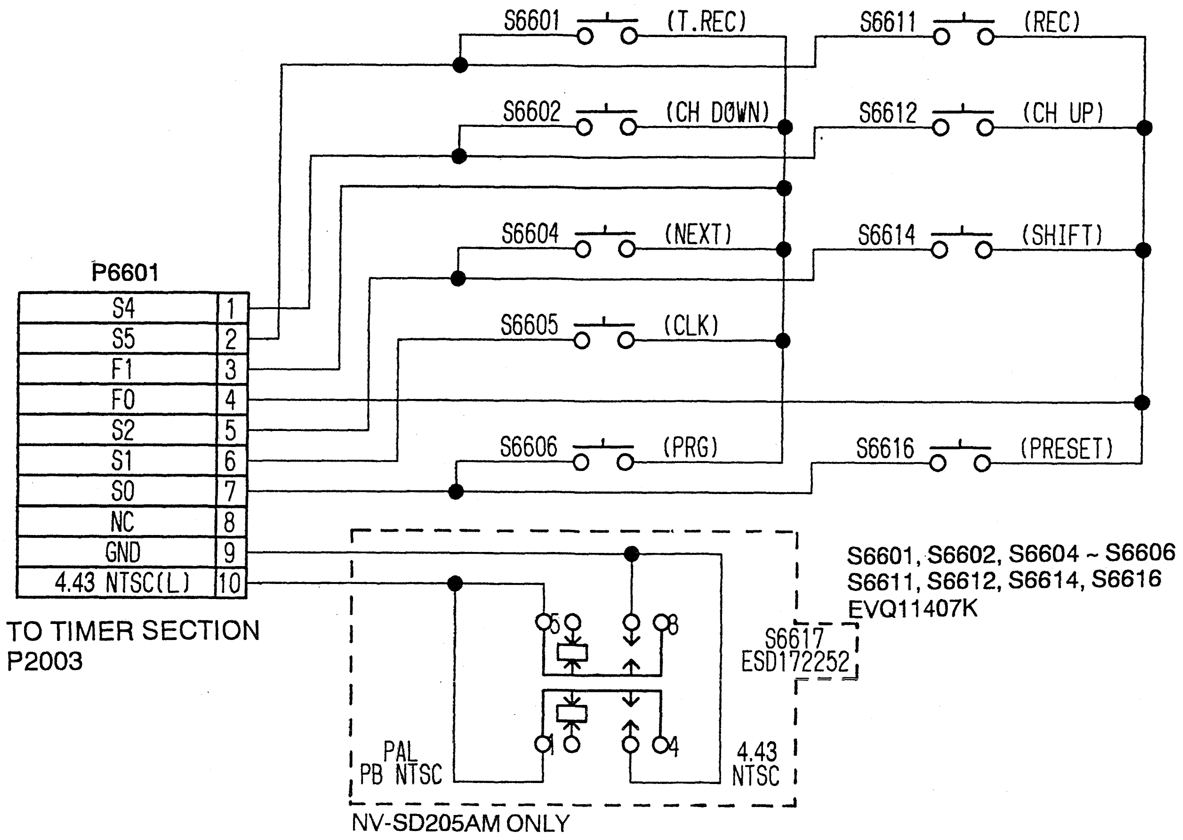
AUDIO SIGNAL PATH


E
D
C
B
A
1
2
3
4
5
6
7
IC0702 LA7975
HPF
MIX
AMP
500KHz OSC
IC0701 LA7576
EQ AMP B/W
N.S.C
AGC
VIDEO AMP
VCO
IF AGC
LOCK DET
APC TIME CONST SW
LIM AMP
FM DET.
IF AMP
PRE AMP
AGC AMP
AFT
PK0701
IF
REG 12V
TUNER AUDIO
GND
AFC S-CURVE
VIDEO MUTE
TUNER VIDEO
AFC DEF
PAL I (H)
TO VIDEO/AUDIO SECTION DU7601
PP0701
AGC
IF
GND
TO TUNER
QR0701 UN2213
(PAL I Ⓗ: ON)
Q0701 MSD601 (AMP)
X0721 EF0A500KT4V3 or VSX0547
X0702 EFCT6R0MS5 or VLF1291
X0703 EFCT3F02W3B or EFCT3F02W5B
X0704 (8pin) VLF1288
K0702
K0704
K0705
T0703 EQV5EC071A
VCO
T0711 EQS5EC032A
SIF
T0704 EQV5EC0073A
AFC
TL0703
L0701 0.22u
L0705 4.7u
L0706 5.6M
VR0701 20KB
R0728 0
R0730 1500
R0731 1K
R0782 10K
R0716 150
R0717 0
R0783 100K
R0710 390K
R0732 470
R0723 270
R0722 100
R0720 1K
R0714 47
R0713 150
R0718 1K
R0709 1M
R0726 1200
R0725 1800
R0727 1000
R0724 18K
R0703 1500
R0704 2200
R0705 5600
R0702 2700
R0719 8200
R0715 18K
R0708 1500
R0707 2700
R0706 2700
C0726 0.01
C0727 16V10
C0725 0.01
C0716 16V10
C0722 0.01
C0723 50V0.1
C0720 0.01
C0719 18P
C0718 50V0.47
C0717 30P
C0715 0.01
C0714 0.047
C0729 16V10
C0724 0.047
C0703 0.01
C0707 0.01
C0701 0.01
C0702 0.01
C0708 0.01
C0706 50V0.1
C0704 330P
C0705 150P
C0709 12P
C0710 47P
C0711 16V10
C0712 0.01
11.8
8.7
11.4
5.9
4.0
4.8
7.5
6.5
1.9
5.7
9.8
6.9
6.6
5.8
5.3
10.8
9.9
5.0
3.6
11.7
10.6
4.7

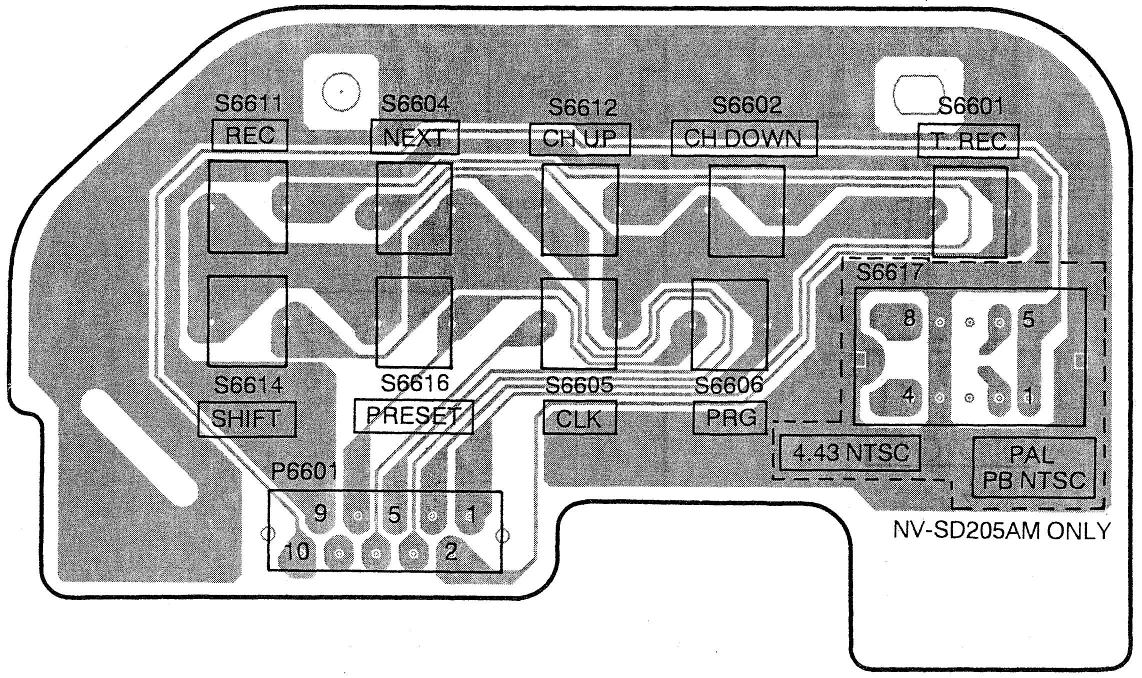
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

2-6. OPERATION SCHEMATIC DIAGRAM



2-7. OPERATION C.B.A.
(VEP07795A:NV-SD205AM, VEP07795B: NV-SD200A/BA)



3. ELECTRICAL REPLACEMENT PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf), P=uuF.
4. The P.C.Board units marked width'■'show below the main assembled parts.
5. The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP06996H	MAIN C.B.A.	1	(RTL)NV-SD200A
			(Page:21)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801N).
		VEP07801N	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-SD200A
					INCLUDED IN MAIN
					C.B.A.(VEP06996H).
		VEP06996J	MAIN C.B.A.	1	(RTL)NV-SD200BA
			(Page:25)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801P).
		VEP07801P	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-SD200BA
					INCLUDED IN MAIN
					C.B.A.(VEP06996J).
		VEP06996E	MAIN C.B.A.	1	(RTL)NV-SD205AM
			(Page:28)		INCLUDING THE
					TV DEMODULATOR PACK
					C.B.A.(VEP07801L).
		VEP07801L	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-SD205AM
					INCLUDED IN MAIN
					C.B.A.(VEP06996E).
		VEP05217A	HEAD AMP C.B.A.	1	(RTL)
			(Page:32)		
		VEP07795B	SWITCH C.B.A.	1	(RTL)NV-SD200A/BA
			(Page:32)		
		VEP07795A	SWITCH C.B.A.	1	(RTL)NV-SD205AM
			(Page:32)		
		VEP01621D	POWER C.B.A.	1	(RTL)<!>
			(Page:32)		NV-SD200A/BA
		VEP01621C	POWER C.B.A.	1	(RTL)<!>NV-SD205AM
			(Page:33)		
		----------	CYLINDER STATOR C.B.A.	1	C.B.A. IS INCLUDED
			(Page:34)		IN CYLINDER STATOR
					UNIT(VEK7236).
		----------	RT CONNECTION C.B.A.	1	C.B.A. IS INCLUDED
			(Page:34)		IN CYLINDER UNIT.
		----------	MOTOR C.B.A.	1	C.B.A. IS INCLUDED
			(Page:34)		IN LOADING MOTOR (1)
					UNIT(VEM0427).
		ENG47228G	TUNER	1	<!>NV-SD200A
		ENG47227G	TUNER	1	<!>NV-SD200BA
					NV-SD205AM
F1101		XBA2C16TBO	FUSE	1	<!>
	■	VEP06996H	MAIN C.B.A.		(RTL)NV-SD200A

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0721,22		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	2	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V 47U	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2013		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2020,21		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	2	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3055		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7008		EECS5R5T473	E.CAPACITOR 5.5V 0.047F	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D1009		1SS254	DIODE	1	
D2001		LN59LT.VT	SENSOR LED	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	
D3001		1SS283	DIODE	1	
D3004		MA151WK	DIODE	1	
D7021-30		1SS254	DIODE	10	
D7031		MA4220	DIODE	1	
DP7001		VSL0337	DISPLAY TUBE	1	
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC2001		BA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1B0	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850P	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80011AP	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC7002		PST7028	IC	1	
IC7003		PST7043	IC	1	
IC7004		PNA4601M02VT	IR RECEIVER UNIT	1	
IC7005		M34240V1BQ	IC	1	
JK3001		VJJ0391	4-PIN JACK	1	
K0702,03		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K0706		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L0701		VLQ0163JR22	COIL 0.22UH	1	
L0706		VLQEL05S8R2K	COIL 8.2UH	1	
L0707		ELJFA100KB	COIL	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL 82UH	1	
L3007		VLQ0599J151	COIL 150H	1	
L3011		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL 470UH	1	
L7601,02		VLQ0599J680	COIL 68UH	2	
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL 68UH	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE) 15P	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR (FEMALE) 4P	1	
P2003		VJP3630A010G	CONNECTOR (MALE) 10P	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2504		VJP1229T	CONNECTOR (MALE) 2P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
P4001		VJS3675A006G	CONNECTOR (FEMALE) 6P	1	
P4002		TJS118601T	CONNECTOR (FEMALE)	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD25440PQA	TRANSISTOR	1	
Q1006		MSD1328	TRANSISTOR	1	
Q1007		2SD1991A	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	PHOTO TR.	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3009		MUN2213	TRANSISTOR-RESISTOR	1	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0721		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG112	M.RESISTOR CH 1/16W 1.1K	1	
R0727		ERJ3GEYG821	M.RESISTOR CH 1/16W 820	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1013,14		ERDS1TJ471	C.RESISTOR 1/2W 470	2	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2031		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2034		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2050		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R2051		ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2085		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3050		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7006		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7016-19		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	4	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
S2001		VES0709	S.TAB SWITCH	1	
S7019,20		EVQ11407K	SWITCH	2	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	COIL	1	
T0704		EQV5EC072A	COIL	1	
T0711		EQS5EC032A	COIL	1	
T4001		EIQ7QF014Q	TRANSFORMER	1	
TU7601		ENG47228G	TUNER	1	<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
VC2016		ECRHA020D54	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCT5R5MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCWS2F11A	CRYSTAL OSCILLATOR	1	
X0704		VLF1072	CRYSTAL OSCILLATOR	1	
X2001		VSX0660	CRYSTAL OSCILLATOR	1	
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VXQ0424	FIP HOLDER	1	
		VMD2330	SENSOR LED HOLDER	1	
		VMD2329	PHOTO TR. HOLDER	2	
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
	■	VEP06996J	MAIN C.B.A.		(RTL)NV-SD200BA
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H300JPV	C.CAPACITOR CH 50V 30P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0722		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V 47U	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2013		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C2242FN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3055		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D2001		LN59LT.VT	SENSOR LED	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D3001		1SS283	DIODE	1	
D3004		MA151WK	DIODE	1	
D7021-30		1SS254	DIODE	10	
D7031		MA4220	DIODE	1	
DP7001		VSL0337	DISPLAY TUBE	1	
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC2001		BA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1B0	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850AP	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80011AP	IC	1	
IC7002		PST7043	IC	1	
IC7004		PNA4601M02VT	IR RECEIVER UNIT	1	
IC7005		M34240V1BQ	IC	1	
JK3001		VJJ0391	4-PIN JACK	1	
K0702		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0705,06		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7607,08		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L0701		VLQ0163JR22	COIL 0.22UH	1	
L0705		VLQ0163K4R7	COIL 4.7UH	1	
L0706		VLQEL05T120	COIL 12UH	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL 82UH	1	
L3007		VLQ0599J151	COIL 150H	1	
L3011		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL 470UH	1	
L7601,02		VLQ0599J680	COIL 68UH	2	
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL 68UH	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE) 15P	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR (FEMALE) 4P	1	
P2003		VJP3630E010G	CONNECTOR (MALE) 10P	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
P4001		VJS3675A006G	CONNECTOR (FEMALE) 6P	1	
P4002		TJS118601T	CONNECTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PK0701		VJR0816A01OW	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD25440PQA	TRANSISTOR	1	
Q1006		MSD1328	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	PHOTO TR.	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	
QR0701		MRN1404	TRANSISTOR-RESISTOR	1	
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3009		MUN2213	TRANSISTOR-RESISTOR	1	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG122	M.RESISTOR CH 1/16W 1.2K	1	
R0727		ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0782		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2034		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2085		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R3050		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7016-19		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	4	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
S2001		VES0709	S.TAB SWITCH	1	
S7019,20		EVQ11407K	SWITCH	2	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	COIL	1	
T0704		EQV5EC073A	COIL	1	
T0711		EQS5EC032A	COIL	1	
T4001		EIQ7QF014Q	TRANSFORMER	1	
TU7601		ENG47227G	TUNER	1	<!>
VC2016		ECRHA020D54	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCWS6004A	CRYSTAL OSCILLATOR	1	
X0704		VLF1288	CRYSTAL OSCILLATOR	1	
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VXQ0424	FIP HOLDER	1	
		VMD2330	SENSOR LED HOLDER	1	
		VMD2329	PHOTO TR. HOLDER	2	
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
	■	VEP06996E	MAIN C.B.A.		(RTL)NV-SD205AM
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H300JPV	C.CAPACITOR CH 50V 30P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0722		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0725		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0727		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0728		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C1001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1006		ECA1CM470	E.CAPACITOR 16V 47U	1	
C1007		ECA1CM101	E.CAPACITOR 16V 10U	1	
C1008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C1009		ECEA1HKA100	E.CAPACITOR 50V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1013		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2003		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2012		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2013		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2014		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C2015		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2017		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
C2022		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2023		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C2024		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2026,27		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	2	
C2029		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2030		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2042		ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
C2044,45		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2048		ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C2049-51		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
C2503		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2504		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2505-07		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C2509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2510		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2511		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2512-14		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2515		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2516		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2517		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2518		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2519		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2520		ECEA1EKA470	E.CAPACITOR 25V 47U	1	
C2521,22		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	2	
C2523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2525		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2526		ECUM1E333KBN	C.CAPACITOR CH 25V 0.33U	1	
C2527		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2528		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2529		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C2530		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2532-34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2535		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3001		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C3002		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3003		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3004		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3005		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3006		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3007		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3009		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3021		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3022		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3023		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3024		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3025		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3027		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3030		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3031		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3034		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3036		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3037		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3038		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3040,41		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C3042,43		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3044		ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048-51		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C3052		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3053		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C3054		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3055		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3057		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3058		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3059,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3061,62		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C3063		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3064		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3065		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3067		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3068		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3069		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3070		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3071		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3072		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3073		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3074		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3075		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3077		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4001		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4002		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4006		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C4007		ECUM1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C4008		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4009		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4010		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4011		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C4012		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4014		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4016		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4018		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4019		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4020		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4021		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4023		ECUM1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C4026		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7006		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7009		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7014		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7601		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7607		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7608		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7613,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7632		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D1002		MA4120	DIODE	1	
D1003		1SS254	DIODE	1	
D1004		MA4300M	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS254	DIODE	1	
D2001		LN59LT.VT	SENSOR LED	1	
D2002		MA700	DIODE	1	
D2005		MA4075-L	DIODE	1	
D2502-05		MA185	DIODE	4	
D2506,07		1SS254	DIODE	2	
D2508-10		MA151WK	DIODE	3	
D3001		1SS283	DIODE	1	
D3003,04		MA151WK	DIODE	2	
D3005		1SS254	DIODE	1	
D7005		1SS254	DIODE	1	
D7017		1SS254	DIODE	1	
D7021-30		1SS254	DIODE	10	
D7031		MA4220	DIODE	1	
DP7001		VSL0337	DISPLAY TUBE	1	
IC0701		LA7576	IC	1	
IC0702		LA7975	IC	1	
IC1001		HA17431PA	IC	1	
IC2001		BA6887-V3	IC	1	
IC2002,03		ON1387T	IC	2	
IC2004		M37774V1BO	IC	1	
IC2005		LM393PS	IC	1	
IC2501		AN3814K	IC	1	
IC2503		BA6871BS	IC	1	
IC3001		AN3500FBP	IC	1	
IC3003		TL8850P	IC	1	
IC3004		LA7356	IC	1	
IC4001		BA7755AF	IC	1	
IC7001		M6M80011AP	IC	1	
IC7002		PST7043	IC	1	
IC7004		PNA4601M02VT	IR RECEIVER UNIT	1	
IC7005		M34240V1BQ	IC	1	
JK3001		VJJ0391	4-PIN JACK	1	
K0702		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0704,05		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3001,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3006		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L0701		VLQ0163JR22	COIL 0.22UH	1	
L0705		VLQ0163K4R7	COIL 4.7UH	1	
L0706		VLQEL05T5R6K	COIL 5.6UH	1	
L2003		VLQ0599J680	COIL 68UH	1	
L2504		ELESE102KA	COIL 1000UH	1	
L3001		VLQ0599J121	COIL 120UH	1	
L3002		ELESE8R2KA	COIL 8.2UH	1	
L3003		ELESE270KA	COIL 27UH	1	
L3004		ELESE101KA	COIL 100UH	1	
L3006		ELESE820JA	COIL 82UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L3007		VLQ0599J151	COIL 150H	1	
L3011		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
L3012		ELESE101KA	COIL 100UH	1	
L3014		ELESE101KA	COIL 100UH	1	
L3015,16		VLQ0599J220	COIL 22UH	2	
L4001		VLQEL07F153J	COIL	1	
L4002		ELESE101KA	COIL 100UH	1	
L4003		ELESE471KA	COIL 470UH	1	
L7601,02		VLQ0599J680	COIL 68UH	2	
L7603		VLQ0599J1R0	COIL 1UH	1	
L7604,05		VLQ0599J680	COIL 68UH	2	
L7606		VLQ0599J1R0	COIL 1UH	1	
L7607		ELESN680KA	COIL 68UH	1	
P1001		VJS3631A015A	CONNECTOR (FEMALE) 15P	1	
P2001		VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002		VJS3821	CONNECTOR (FEMALE) 4P	1	
P2003		VJP3630E010G	CONNECTOR (MALE) 10P	1	
P2502		VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P2505		VJP3502	CONNECTOR (MALE)	1	
P2506		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P3001		VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
P4001		VJS3675A006G	CONNECTOR (FEMALE) 6P	1	
P4002		TJS118601T	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q1003		2SD1996	TRANSISTOR	1	
Q1004		2SD25440PQA	TRANSISTOR	1	
Q1006		MSD1328	TRANSISTOR	1	
Q2002		MSB709	TRANSISTOR	1	
Q2003,04		PN205LT-NCVT	PHOTO TR.	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q4005		2SD602A-R	TRANSISTOR	1	
Q4006		2SB709A	TRANSISTOR	1	
Q4301		MSD1328	TRANSISTOR	1	
QR0701		MRN1404	TRANSISTOR-RESISTOR	1	
QR2002		MUN2213	TRANSISTOR-RESISTOR	1	
QR2003		XN1211	TRANSISTOR-RESISTOR	1	
QR2004		MUN2211	TRANSISTOR-RESISTOR	1	
QR2005		MUN2113	TRANSISTOR-RESISTOR	1	
QR2006		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3004		MUN2213	TRANSISTOR-RESISTOR	1	
QR3005		MUN2212	TRANSISTOR-RESISTOR	1	
QR3008,09		MUN2213	TRANSISTOR-RESISTOR	2	
QR4001		MUN2213	TRANSISTOR-RESISTOR	1	
QR4002		MUN2212	TRANSISTOR-RESISTOR	1	
QR4003		MUN2213	TRANSISTOR-RESISTOR	1	
QR4301		UN2115	TRANSISTOR-RESISTOR	1	
QR7003		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG122	M.RESISTOR CH 1/16W 1.2K	1	
R0727		ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R0730		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0731		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0782		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1002		ERG2SJ331	M.RESISTOR 2W 330	1	
R1003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1007		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1008		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1011		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1015		ERG2SJ331	M.RESISTOR 2W 330	1	
R1016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2005		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2009		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2011		ERJ8GEYJ271	M.RESISTOR CH 1/8W 270	1	
R2012,13		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2014-16		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R2017		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2018,19		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2023		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2026		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2027,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2032		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2034		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2035		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2037		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2040		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2045		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2046		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2047		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2048		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2052		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2053		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2054,55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2056		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R2057		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2058		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2059,60		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2061,62		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2063		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2064,65		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2066		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2068		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2069		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2070		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2071		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2072,73		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2074		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2081		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2085		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2086,87		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2501		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2503		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2504		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2505-07		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2508		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2509		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2511,12		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2513		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2514		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2515		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2516		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2518		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2519		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2520		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2521		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2522		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2523		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2524		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2526		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2527		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2529		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R3001		ERJ6GMYG121	M.RESISTOR CH 1/10W 120	1	
R3002,03		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	2	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3007		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R3008		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3009		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3011		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3012,13		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3014		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3015		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R3016		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R3017,18		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3019		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3020		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3021		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3022		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3025		ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3026		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3027		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3030		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3032		ERJ6GMYK125	M.RESISTOR CH 1/10W 1.5M	1	
R3034		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3035		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3036		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3037		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3040		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R3041		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3042		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3045		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3046		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3050		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3051		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R3052		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3053		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4002		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4003		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4004		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4005		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4006		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4007		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4008		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4009		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4010		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4012		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4013		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4014		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4018		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4019		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4020		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4024		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4025		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4026		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4027		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4301		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7002		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7008		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7009-12		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R7013		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R7014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7015		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7016-19		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	4	
R7020,21		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7025		ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
R7601		ERJ6GMYJ102	M.RESISTOR CH 1/10W . 1K	1	
R7602,03		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7604		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7609,10		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7625		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7626		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
S2001		VES0709	S.TAB SWITCH	1	
S7019,20		EVQ11407K	SWITCH	2	
S7601		VSS0106	SWITCH	1	
S7602		VSS0398	SWITCH	1	
T0703		EQV5EC071A	COIL	1	
T0704		EQV5EC073A	COIL	1	
T0711		EQS5EC032A	COIL	1	
T4001		EIQ7QF014Q	TRANSFORMER	1	
TU7601		ENG47227G	TUNER	1	<!>
VC2016		ECRHA020D54	V.CAPACITOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
X0702		EFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCT3F02W5B	CRYSTAL OSCILLATOR	1	
X0704		VLF1288	CRYSTAL OSCILLATOR	1	
X0721		EFOA500KT4V3	CRYSTAL OSCILLATOR	1	
X2002		VSX0659	CRYSTAL OSCILLATOR	1	
X3001		VSX0162	CRYSTAL OSCILLATOR	1	
X7001		VSX0661	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VXQ0424	FIP HOLDER	1	
		VMD2330	SENSOR LED HOLDER	1	
		VMD2329	PHOTO TR. HOLDER	2	
		VMD2328	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP05217A	HEAD AMP C.B.A.		(RTL)
C501,02		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C503,04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C505		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C506		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
IC501		AN3375S	IC	1	
L501		VLQ0599J101	COIL 100UH	1	
P501		VJS2331	CONNECTOR (FEMALE)	1	
P502		VJS3069	CONNECTOR (FEMALE)	1	
R501		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R502		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R503		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R504		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R505		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R506,07		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R508		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
			MISCELLANEOUS		
		VSC4208	SHIELD CASE	1	
	■	VEP07795B	SWITCH C.B.A.		(RTL)NV-SD200A/BA
P6601		VJS3630B010B	CONNECTOR (FEMALE) 10P	1	
S6601,02		EVQ11407K	SWITCH	2	
S6604-06		EVQ11407K	SWITCH	3	
S6611,12		EVQ11407K	SWITCH	2	
S6614		EVQ11407K	SWITCH	1	
S6616		EVQ11407K	SWITCH	1	
	■	VEP07795A	SWITCH C.B.A.		(RTL)NV-SD205AM
P6601		VJS3630B010B	CONNECTOR (FEMALE) 10P	1	
S6601,02		EVQ11407K	SWITCH	2	
S6604-06		EVQ11407K	SWITCH	3	
S6611,12		EVQ11407K	SWITCH	2	
S6614		EVQ11407K	SWITCH	1	
S6616		EVQ11407K	SWITCH	1	
S6617		ESD172252	SWITCH	1	
	■	VEP01621D	POWER C.B.A.		(RTL)<!>
					NV-SD200A/BA
C1101		ECKMWS471MBH	C.CAPACITOR	1	<!>
C1104		ECKMWS471MBH	C.CAPACITOR	1	<!>
C1107		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1110		ECQU2A683MV	P.CAPACITOR 250V	1	
C1111		ECQU2A154MNB	P.CAPACITOR 250V 0.15U	1	<!>
C1112		ECEC2GG330	E.CAPACITOR 400V 33U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KG	C.CAPACITOR 1KV 47P	1	
C1115		ECA1VGE470X	E.CAPACITOR 35V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1116		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1120		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1121		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C1131		EEUFA1E331	E.CAPACITOR 25V 330P	1	
C1132		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A391B	E.CAPACITOR 10V 390P	1	
C1135		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1137		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1138		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1139		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1140		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1141		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1143		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1147		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1148		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1150		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
D1101		ENC471D5A	DIODE	1	
D1102		S1WBA60S	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA178	DIODE	1	
D1121		RL2Z	DIODE	1	
D1122		AK04	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		AK04	DIODE	1	
D1126		MA4043-L	DIODE	1	
D1127		1SS254	DIODE	1	
IC1101		TDA4605-3	IC	1	
L1108		ELF18D221F	COIL 220UH	1	<!>
L1109		VLP0074	COIL	1	
L1110		VLP0085	COIL	1	
L1121		VLQ0611K220	COIL 22UH	1	
L1122		ELELE220KA	COIL 22UH	1	
L1123,24		ELESE101KA	COIL 100UH	2	
P1101		VJS3306	AC INLET	1	<!>
P1103		VJP3631A015W	CONNECTOR (MALE) 15P	1	
PR1101		VSF0015A10	IC PROTECTOR	1	<!>
Q1101		STP3N60FI-M	TRANSISTOR	1	<!>
Q1102		2SD1991A	TRANSISTOR	1	
Q1111		MOC8104T	TRANSISTOR	1	<!>
QR1101		UN6114	TRANSISTOR-RESISTOR	1	
R1101		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1102,03		ERG1SJ273	M.RESISTOR 1W 27K	2	
R1104		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R1107		ERDS2FJ164	C.RESISTOR 1/4W 160K	1	
R1108		ERDS2FJ105	C.RESISTOR 1/4W 1M	1	
R1109		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1110		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1111		ERDS2FJ222	C.RESISTOR 1/4W 2.2K	1	
R1112		ERDS2FJ304	C.RESISTOR 1/4W 300K	1	
R1113		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1114		ERX12SJR75	M.RESISTOR 1/2W 0.75	1	
R1115		ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1116		ERDS2FJ100	C.RESISTOR 1/4W 10	1	
R1117		ERDS2FJ472	C.RESISTOR 1/4W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1122		ERC12AGM334	S.RESISTOR 1/2W 330K	1	
R1125		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1127		ERDS2FJ333	C.RESISTOR 1/4W 33K	1	
R1128		ERDS2FJ332	C.RESISTOR 1/4W 3.3K	1	
R1129		ERDS2FJ223	C.RESISTOR 1/4W 22K	1	
R1133		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1134		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1135		ERDS2FJ274	C.RESISTOR 1/4W 270K	1	
R1136,37		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	2	
R1138		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1139		ERDS2TJ475	C.RESISTOR 1/4W 4.7M	1	
S7511-14		EVQ11407K	SWITCH	4	
T1101		VLT0749	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		EYF52BC	FUSE HOLDER	2	<!>
	■	VEP01621C	POWER C.B.A.		(RTL)<!>NV-SD205AM
C1101		ECKMWS331MBH	C.CAPACITOR	1	<!>
C1104		ECKMWS331MBH	C.CAPACITOR	1	<!>
C1110		ECQU2A333MV	P.CAPACITOR 250V 0.033U	1	
C1112		ECEC2GG680	E.CAPACITOR 400V 68U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KG	C.CAPACITOR 1KV 47P	1	
C1115		ECA1VGE470X	E.CAPACITOR 35V 47U	1	
C1116		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1120		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1121		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C1131		EEUFA1E331	E.CAPACITOR 25V 330P	1	
C1132		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A391B	E.CAPACITOR 10V 390P	1	
C1135		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1137		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1138		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1139		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1140		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1141		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1143		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1147		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1148		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1150		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
D1102		S1WBA60S	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA178	DIODE	1	
D1121		RL2Z	DIODE	1	
D1122		AK04	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		AK04	DIODE	1	
D1126		MA4043-L	DIODE	1	
D1127		1SS254	DIODE	1	
IC1101		TDA4605-3	IC	1	
L1107,08		ELF18D290A	COIL 29UH	2	<!>
L1109		VLP0074	COIL	1	
L1110		VLP0085	COIL	1	
L1121		VLQ0611K220	COIL 22UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L1122		ELELE220KA	COIL 22UH	1	
L1123,24		ELESE101KA	COIL 100UH	2	
P1101		VJS3306	AC INLET	1	<!>
P1103		VJP3631A015W	CONNECTOR (MALE) 15P	1	
PR1101		VSF0015A10	IC PROTECTOR	1	<!>
Q1101		STP3N60FI-M	TRANSISTOR	1	<!>
Q1102		2SD1991A	TRANSISTOR	1	
Q1111		MOC8104T	TRANSISTOR	1	<!>
QR1101		UN6114	TRANSISTOR-RESISTOR	1	
R1101		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1102,03		ERG1SJ273	M.RESISTOR 1W 27K	2	
R1104		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R1107		ERDS2FJ164	C.RESISTOR 1/4W 160K	1	
R1108		ERDS2FJ105	C.RESISTOR 1/4W 1M	1	
R1109		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1110		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1111		ERDS2FJ222	C.RESISTOR 1/4W 2.2K	1	
R1112		ERDS2FJ304	C.RESISTOR 1/4W 300K	1	
R1113		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1114		ERX12SJR75	M.RESISTOR 1/2W 0.75	1	
R1115		ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1116		ERDS2FJ100	C.RESISTOR 1/4W 10	1	
R1117		ERDS2FJ472	C.RESISTOR 1/4W 4.7K	1	
R1125		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1127		ERDS2FJ333	C.RESISTOR 1/4W 33K	1	
R1128		ERDS2FJ332	C.RESISTOR 1/4W 3.3K	1	
R1129		ERDS2FJ223	C.RESISTOR 1/4W 22K	1	
R1133		ERDS2FJ474	C.RESISTOR 1/4W 470K	1	
R1134		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	1	
R1135		ERDS2FJ274	C.RESISTOR 1/4W 270K	1	
R1136,37		ERDS2FJ822	C.RESISTOR 1/4W 8.2K	2	
R1138		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1139		ERDS2TJ475	C.RESISTOR 1/4W 4.7M	1	
S7511-14		EVQ11407K	SWITCH	4	
T1101		VLT0750	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		EYF52BC	FUSE HOLDER	2	<!>
	▮	----------	CYLINDER STATOR C.B.A		
			MISCELLANEOUS		
		HW-300A-CF	HALL IC	1	
		VJS3537F009G	CONNECTOR (FEMALE) 9P	1	
	▮	----------	RT CONNECTOR C.B.A.		
			MISCELLANEOUS		
		VJP3578	HEAD AMP CONNECTOR	1	
	▮	----------	MOTOR C.B.A.		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (FEMALE) 2P	1	

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Order No. VRD9601S002

Service Manual

Video Product

Supplement

Effective from : First Production

Model No. NV-SD200A/BA
NV-SD200AM
NV-SD205AM
NV-SD250A/EA/BA

Subject : Correction of Parts List

Please use this manual together with the Service Manual for Order No. VRD9508M127 Model No. NV-SD200A/BA, NV-SD205AM and Order No. VRD9507M122 Model No. NV-SD200AM, NV-SD250A/EA/BA.

■ The following parts has been Corrected.

IMPORTANT SAFETY NOTICE :
COMPONENTS IDENTIFIED THE MARK < ! > HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

■ NV-SD200A/BA, SD205AM

INTERCHANGEABILITY CODE — See the I/C column on the following Part Number list

	Parts → Prdctn		Parts → Prdctn		Parts → Prdctn		Parts → Prdctn		
A	Orgnl → Late New → Early	B	Orgnl → Early New → Early New → Late	C	New → Early New → Late	D	Orgnl → Early New → Late	E	Addition
								F	Deletion
								G	Other

Parts Number List

Ref. No	Part No.	Part Name & Description		I/C	Remarks
		Original	Correction		
	■MAIN C.B.A.				
C1002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C1007	ECA1CM101	E. CAPACITOR 16V 10U	E. CAPACITOR 16V 100U	G	
C2015	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2036	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2519	ECEA1HKNR22	E. CAPACITOR 50V 0.22	E. CAPACITOR 50V 0.22U	G	
C2521	ECUM1E333KBN	C. CAPACITOR 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2522	ECUM1E333KBN	C. CAPACITOR 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2526	ECUM1E333KBN	C. CAPACITOR 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C3019	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C3053	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4011	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C7006	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
L3007	VLQ0599J151	COIL 150H	COIL 150UH	G	
R3032	ERJ6GMYK125	M. RESISTOR CH 1/10W 1.5M	M. RESISTOR CH 1/10W 1.2M	G	
R3046	ERJ6GMYJ104	M. RESISTOR CH 1/10W 1M	M. RESISTOR CH 1/10W 100K	G	NV-SD200A, 205AM
	■POWER C.B.A.				
C1110	ECQU2A683MV	P. CAPACITOR 250V	P. CAPACITOR 100V 0.068U	G	NV-SD200A/BA
C1110	ECQU2A333MV	P. CAPACITOR 250V 0.033U	P. CAPACITOR 100V 0.033U	G	NV-SD205AM
C1111	ECQU2A154MNB	P. CAPACITOR 250V 0.15U	P. CAPACITOR 100V 0.15U	G	< ! >
C1131	EEUFA1E331	E. CAPACITOR 25V 330P	E. CAPACITOR 25V 330U	G	
C1134	EEUFA1A391B	E. CAPACITOR 10V 390P	E. CAPACITOR 10V 390U	G	

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

■ The following parts has been Corrected.

IMPORTANT SAFETY NOTICE :

COMPONENTS IDENTIFIED THE MARK < ! > HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

■ NV-SD200AM, SD250A/EA/BA

INTERCHANGEABILITY CODE See the I/C column on the following Part Number list

	Parts	Prdctn		Parts	Prdctn		Parts	Prdctn		Parts	Prdctn		
A	Orgnl New	⇄ Early ⇄ Late	B	Orgnl New	→ Early ↔ Late	C	Orgnl New	↗ Early ↔ Late	D	Orgnl New	→ Early → Late	E	Addition
												F	Deletion
												G	Other

Parts Number List

Ref. No.	Part No.	Part Name & Description		I/C	Remarks
		Original	Correction		
	■**MAIN C.B.A.**				
C1002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C1006	ECA1CM470	E. CAPACITOR 16V	E. CAPACITOR 16V 47U	G	
C1007	ECA1CM101	E. CAPACITOR 16V 10U	E. CAPACITOR 16V 100U	G	
C2015	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2036	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C2519	ECEA1HKNR22	E. CAPACITOR 50V 0.22	E. CAPACITOR 50V 0.22U	G	
C2521	ECUM1E333KBN	C. CAPACITOR CH 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2522	ECUM1E333KBN	C. CAPACITOR CH 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C2526	ECUM1E333KBN	C. CAPACITOR CH 25V 0.33U	C. CAPACITOR CH 25V 0.033U	G	
C3019	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C3053	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4002	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C4011	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C7006	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	
C7711	ECEA0JKA220	E. CAPACITOR 6.3V 220U	E. CAPACITOR 6.3V 22U	G	NV-SD250A/EA/BA
IC7004	PNA4601M02VT	TRANSISTOR	INTEGRATED CIRCUIT	G	
L3006	ELESE820JA	COIL H	COIL 82UH	G	
L3007	VLQ0599J151	COIL 150H	COIL 150UH	G	
L4003	ELESE471KA	COIL	COIL 470UH	G	
L7607	ELESN680KA	COIL H	COIL 68UH	G	
L7703	VLQ0599J4R7	COIL H	COIL 4.7UH	G	NV-SD250A/EA/BA
R3032	ERJ6GMYK125	M. RESISTOR CH 1/10W 1.5M	M. RESISTOR CH 1/10W 1.2M	G	
R3046	ERJ6GMYJ104	M. RESISTOR CH 1/10W 1M	M. RESISTOR CH 1/10W 100K	G	
R7706	ERJ6GMYJ104	M. RESISTOR CH 1/10W 1M	M. RESISTOR CH 1/10W 100K	G	NV-SD250A/EA/BA
	■**POWER C.B.A.**				
C1110	ECQU2A333MV	P.CAPACITOR 250V 0.033U	P.CAPASITOR 100V 0.033U	G	NV-SD200AM
C1110	ECQU2A683MV	P.CAPACITOR 250V	P.CAPASITOR 100V 0.068U	G	NV-SD250A/EA/BA
C1111	ECQU2A154MNB	P.CAPACITOR 250V 0.15U	P.CAPASITOR 100V 0.15U	G	< ! > NV-SD250A/EA/BA
C1131	EEUFA1E331	E. CAPACITOR 25V 330P	E. CAPACITOR 25V 330U	G	
C1134	EEUFA1A391B	E. CAPACITOR 10V 390P	E. CAPACITOR 10V 390U	G	

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Order No. VRD9701S002

Service Manual

Supplement

Video Product

Effective from : Mentioned Below

Model No. Mentioned Be

Subject : Change of Parts

Please use this service manual together with the service manual for Order No. and Model No. Mentioned Below

MODEL NO.	ORDER NO.
NV-SD260EG/EGH/B,SD410EG/EGH	VRD9604M109
NV-HD610EG/EGH/B/EC,HD605B/BL	VRD9604M112
NV-HD610F/PS,HD605F	VRD9606M119
NV-SD260ER,SD410ER/B/BL	VRD9605M113
NV-SD410F/PS	VRD9606M117
NV-HD660EG/EGH/B/EC	VRD9608M120
NV-HD660F	VRD9609M124
NV-SD460EG/EGH	VRD9608M121
NV-SD460F	VRD9609M125
NV-SD200B	VRD9506M121,VRD9605S016
NV-SD200EG/EI/BI	VRD9508M123,VRD9605S016
NV-SD200EGH,SD250EGH,SD300EGH SD450EGH,HD650EGH,HS900EGH	VRD9512M159,VRD9605S016
NV-SD450EG	VRD9509M138
NV-SD450B	VRD9509M140
NV-SD450F	VRD9511M150
NV-SD450EEM,HD650EEM	VRD9606M122
NV-SD450A/EA	VRD9511M152
NV-SD350AM,SD450EU/EE	VRD9511M154
NV-HD650EG	VRD9509M137
NV-HD650B/EC	VRD9509M139
NV-HD650F	VRD9511M149
HD650EE/AM/BD,HD655AM	VRD9511M153
NV-HD650A/EA	VRD9511M151
NV-HD650MK2A	VRD9608M123
NV-SD200F/PS	VRD9510M141,VRD9605S016
NV-SD250EG	VRD9510M143,VRD9605S016
NV-SD300EG/EI	VRD9509M128,VRD9605S016
NV-SD300F	VRD9511M147,VRD9605S016
NV-HS900EG	VRD9511M156
NV-HS900B/EC	VRD9604M111
NV-HS900F	VRD9602M104
NV-SD200AM,SD250A/EA/BA	VRD9507M122
NV-SD200AMM,SD205AMM	VRD9511M145
NV-SD205AM,SD200A/BA	VRD9508M127
NV-SD205EU,SD207EE	VRD9508M126
NV-SD190BA	VRD9512M146
NV-SD55CMC	VRD9603M106

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Effective From : Running Change

INTERCHANGEABILITY CODE See the I/C column on the following Part Number List

A	Parts	Production	B	Parts	Production	C	Parts	Production	D	Parts	Production	E	Addition
	Original	Early		Original	Early		Original	Early		Original	Early	F	Deletion
	New	Late		New	Late		New	Late		New	Late	G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
R1118	JUMPER WIRE	ERG1SJ100E	RESISTOR	B	*1
C1101	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*2 ⚠
C1102	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*2 ⚠
C1103	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*2 ⚠
C1105	ECQU2A154MV	ECQU2A154MVA	CAPACITOR	B	*2 ⚠
C1106	ECQU2A154MV	ECQU2A154MVA	CAPACITOR	B	*2 ⚠
C1101	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*3 ⚠
C1104	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*3 ⚠
C1107	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*3 ⚠
C1110	ECQU2A104MV	ECQU2A104MVA	CAPACITOR	B	*3 MBV ⚠
C1111	ECQU2A104MV	ECQU2A104MVA	CAPACITOR	B	*3 MBV ⚠
C1101	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*4 ⚠
C1104	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*4 ⚠
C1107	ECKMWS102MEH	ECKMWS102MEF	CAPACITOR	B	*4 ⚠
R1118	ERJ8GEY0R00	ERG1SJ100E	RESISTOR	C	*5
W6	JUMPER WIRE	———	JUMPER WIRE	F	*3
R1118	———	ERG1SJ100E	RESISTOR	E	*3

*1 : NV-SD200AM,SD200AMM,SD205AM,SD205AMM,SD250A/EA/BA,SD200A/BA,SD205EU,207EE,SD190BA,SD55CMC
NV-SD200B/BI/EG/EGS/EGN/EGH/EI/F/PS,SD250EG/EGH,SD300EG/EGH/EI/F,SD260B/EG/EGS/EGN/EGH/ER
NV-SD410B/BL/EG/EGS/EGN/EGH/ER/F/PS

*2 : NV-HS900EG/EC/B/EGH/F

*3 : NV-HD610EG/B/EC/EGH/F/PS,HD660EG/EGH/B/EC/F,HD605B/BL/F,SD460EG/EGH/F
POWER C.B.A.(VEP01763) has been changed.

*4 : NV-SD200B/BI/EG/EGS/EGN/EGH/EI/F/PS,SD250EG/EGH,SD300EG/EGH/EI/F,SD260B/EG/EGH/EGS/EGN/ER
NV-SD410B/BL/EG/EGS/EGN/EGH/ER/F/PS

*5 : NV-SD450EG/B/F/EE/EGH/EEM/A/EA/EU,SD350AM,HD650EG/B/EC/F/EE/EGH/EEM/A/EA/AM/BD/MK2A,HD655AM
MAIN C.B.A.(VEP06980) has been changed.

Order No. VRD9704002S3

Service Manual

Supplement

Effective from : Mentioned Below

Video Product

Model No. Mentioned Below

Subject : Change of Parts

Please use this service manual together with the service manual for Order No. and Model No. Mentioned Below

MODEL NO.	ORDER NO.	MODEL NO.	ORDER NO.
NV-SD200AM,SD250A/EA/BA	VRD9507M122 V15131	NV-HP3MCAN	VRD9510M136
NV-SD200AM M,SD205AM M	VRD9511M145 V15006	NV-P03RM2AMD	VRD9502M107
NV-SD190BA	VRD9512M146 V15507	NV-SD320AM,	VRD9611M126 V15204
NV-SD205AM,SD200A/BA	VRD9508M127 V14662	SD420A/EA/SA/EU	————
NV-SD205EU,SD207EE	VRD9508M126	NV-SD350AM,SD450EU/EE	VRD9511M154 V15532
NV-P01M2AM,P03RM2AM,	VRD9410M153	NV-SD450A/EA	VRD9511M152
P04RM2EE	————	NV-SD400MK2A/M2EA	VRD9507M125
NV-HP3MCA	VRD9410M151	NV-SD407EE	VRD9506M117
NV-P05REE/REU	VRD9504M111	NV-SD407EE M,SD450EE M,	VRD9606M122
NV-P01M2AMN,P03RM2AMN	VRD9510M135 V15120	HD600EE M,HD650EE M	————
P04RM2EEN,P05REEN/REUN	————	NV-SD410AR/BR,HD610PM	VRD9605M114
————	————	NV-SD460AR/BR/PM,HD660PM	VRD9607M118

Effective From : Z-MECHANISM MODEL : MAR. '97 Production
K-MECHANISM MODEL : Running Change

INTERCHANGEABILITY CODE See the I/C column on the following Part Number List

	Parts	Production		Parts	Production		Parts	Production		Parts	Production		
A	Original	Early	B	Original	Early	C	Original	Early	D	Original	Early	E	Addition
	New	Late		New	Late		New	Late		New	Late	F	Deletion
												G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
73(1)	VEG1216	VEG1421	CYLINDER UNIT	A	*1
70/73(1)	VEG1221	VEG1420	CYLINDER UNIT	A	*2
73/75(1)	VXP1500	VXP1823	CYLINDER ROTOR UNIT	A	
70/73(1)	VEG1420	VEG1405	CYLINDER UNIT	A	*3
	VEH0715	VEH0841	UPPER CYLINDER UNIT	A	*3

*1 : NV-SD200AM/AM M/BA, SD190BA, SD205AM/AM M/EU, SD207EE, SD250A/EA/BA, P01M2AM/N, P03RM2AM/D/N, P04RM2EE/N, P05REE/N, P05REU/N, HP3MCA/N

*2 : NV-SD350AM, SD450A/EA/EU/EE/EE M, SD400M2EA, SD407EE/EE M, SD410AR, SD460AR

*3 : NV-SD320AM, SD420A/EA/SA/EU, SD350AM, SD450A/EA/EU/EE/EE M, SD400M2EA, SD407EE/EE M, SD410AR, SD460AR

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

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INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.
Do not order any parts according to these codes.

P. C. B.	FILM CODE
SYUGOU (MAIN,SW,HEAD AMP)	FUAI00–0297A
VIF	FUAI00–07801